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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS	3	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS	4	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	5	AUG 24	CA/CAPLUS enhanced with legal status information for U.S. patents
NEWS	6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS	9	OCT 21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS	10	NOV 23	Addition of SCAN format to selected STN databases
NEWS	11	NOV 23	Annual Reload of IFI Databases
NEWS	12	DEC 01	FRFULL Content and Search Enhancements
NEWS	13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS	17	DEC 21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAPLUS
NEWS	18	JAN 12	Match STN Content and Features to Your Information Needs, Quickly and Conveniently

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,  
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

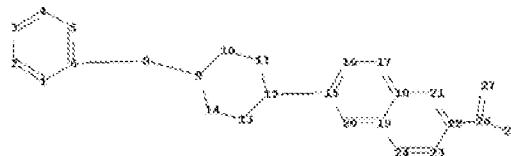
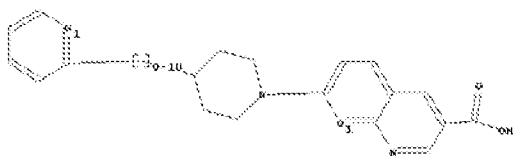
FILE 'HOME' ENTERED AT 13:30:49 ON 14 JAN 2010

of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10583419.str



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chain nodes :
8 26 27 28
ring nodes :
1 2 3 4 5 6 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
chain bonds :
6-8 8-9 12-15 22-26 26-27 26-28
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14 15-16 15-20
16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 23-24
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 6-8 8-9 9-10 9-14 10-11 11-12 12-13 12-15 13-
14 15-16 15-20 16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 22-26
23-24
normalized bonds :
26-27 26-28
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G1:C,N

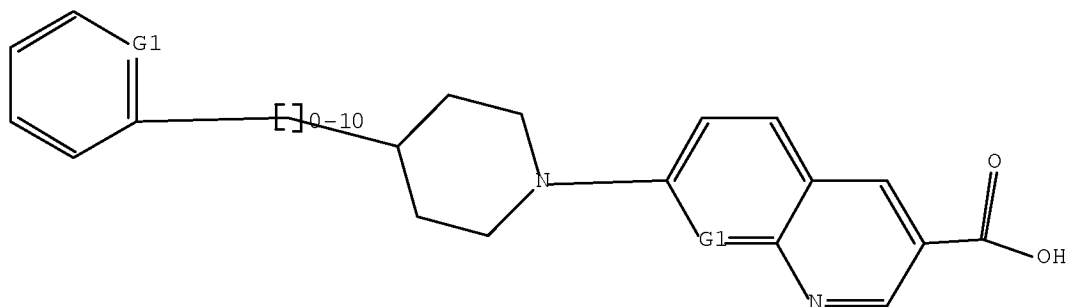
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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 26:CLASS 27:CLASS
28:CLASS
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:31:54 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 25 TO ITERATE

100.0% PROCESSED 25 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 200 TO 800

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 13:32:00 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 748 TO ITERATE

100.0% PROCESSED 748 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

STRUCTURE FILE UPDATES: 13 JAN 2010 HIGHEST RN 1202161-01-0

DICTIONARY FILE UPDATES: 13 JAN 2010 HIGHEST RN 1202161-01-0

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when  
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REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information

on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

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chain nodes :

8

ring nodes :

1 2 3 4 5 6 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

6-8 8-9 12-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14 15-16 15-20  
16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 6-8 8-9 9-10 9-14 10-11 11-12 12-13 12-15 13-14  
15-16 15-20 16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 23-24

G1:C,N

Match level :

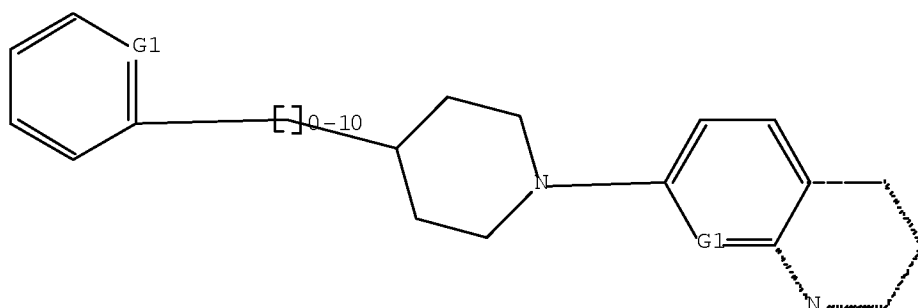
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11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS

L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

L4 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l4

SAMPLE SEARCH INITIATED 13:33:58 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1095 TO ITERATE

100.0% PROCESSED 1095 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 19915 TO 23885

PROJECTED ANSWERS: 1 TO 80

L5 1 SEA SSS SAM L4

=> s l4 ful

FULL SEARCH INITIATED 13:34:04 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 21544 TO ITERATE

100.0% PROCESSED 21544 ITERATIONS

45 ANSWERS

SEARCH TIME: 00.00.01

L6 45 SEA SSS FUL L4

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FILE COVERS 1907 - 14 Jan 2010 VOL 152 ISS 3

FILE LAST UPDATED: 12 Jan 2010 (20100112/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

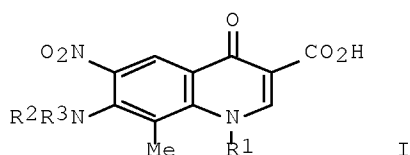
=> s 16

L7 24 L6

=> d abs fbib fhitr 1-24

L7 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

GI



AB Fifty one quinoline-3-carboxylic acids I (R1 = c-Pr, t-Bu, 2,4-F2C6H3; R2R3N = 17 secondary amines) were synthesized from 1,3-dichloro-2-methylbenzene and evaluated for in-vitro antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB), and Mycobacterium smegmatis (MC2). Among the synthesized compds., I (R1 = c-Pr, R2R3N = 1,2,3,4-tetrahydro-6,7-dimethoxy-2-isoquinolinyl) was found to be the most active compound in vitro with a MIC value of 0.39  $\mu$ M against MTB. Against MDR-TB, compound I (R1 = c-Pr, R2R3N = 2-carboxy-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-7-yl) was found to be the most active with a MIC value of 0.09  $\mu$ M. Generally, quinoline-3-carboxylic acids I (R1 = c-Pr) were most active and most were tested for their cytotoxicity in a mammalian Vero cell line.

AN 2009:254822 CAPLUS Full-text

DN 150:472531

TI Synthesis and in-vitro antimycobacterial evaluation of 1-(cyclopropyl/2,4-difluorophenyl/tert-butyl)-1,4-dihydro-8-methyl-6-nitro-4-oxo-7-(substituted secondary amino)quinoline-3-carboxylic acids

AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Chandraseakaran, Yogesh; Yogeewari, Perumal; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy Group, Birla Institute of Technology and Science, Pilani, India

SO Archiv der Pharmazie (Weinheim, Germany) (2009), 342(2), 100-112

CODEN: ARPMAS; ISSN: 0365-6233

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

OS CASREACT 150:472531

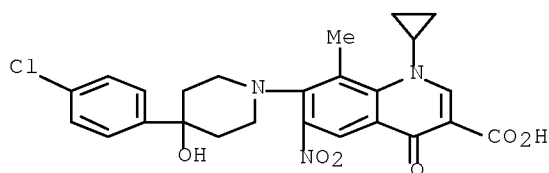
IT 1146300-42-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of (amino)(oxo)quinolinecarboxylic acids and their antimycobacterial structure-activity relationships)

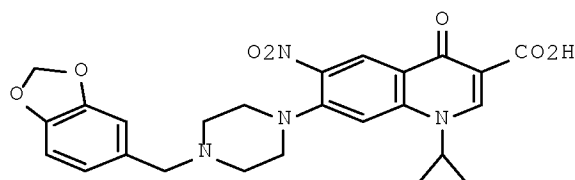
RN 1146300-42-6 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-8-methyl-6-nitro-4-oxo- (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
GI



I

AB Various 1-(substituted)-1,4-dihydro-6-nitro-4-oxo-7-(sub-secondary amino)-quinoline-3-carboxylic acids were synthesized from 2,4-dichlorobenzoic acid by six step synthesis. The compds. were evaluated for antimycobacterial in vitro and in vivo against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the 48 synthesized compds., compound I was found to be the most active compound in vitro with MIC of 0.08 and 0.16  $\mu$ M against MTB and MDR-TB, resp. In the in vivo animal model, compound I decreased the bacterial load in lung and spleen tissues with 2.78 and 4.15-log 10 protections, resp., at the dose of 50 mg/kg body weight

AN 2009:5914 CAPLUS Full-text

DN 150:259917

TI Synthesis and antimycobacterial activities of novel  
6-nitroquinolone-3-carboxylic acids

AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Yogeewari, Perumal;  
Sriram, Dharmarajan; China, Arnab; Nagaraja, Valakunja

CS Medicinal Chemistry Research Laboratory, Pharmacy Group, Birla Institute  
of Technology and Science, Pilani, 333031, India

SO European Journal of Medicinal Chemistry (2009), 44(1), 345-358  
CODEN: EJMCA5; ISSN: 0223-5234

PB Elsevier Masson SAS

DT Journal

LA English

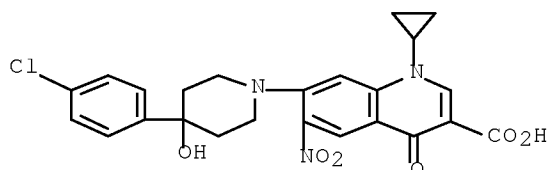
OS CASREACT 150:259917

IT 1119087-07-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation)

(preparation of nitroquinolinolonecarboxylic acids via nitration of  
dichlorobenzoic acid followed by alkylation, cyclization with amines  
and amination with secondary amines, and their antimycobacterial

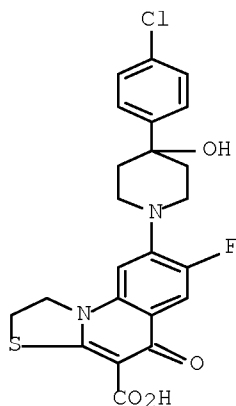
activity)  
 RN 1119087-07-8 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 AB Thirty four novel 7-fluoro/nitro-1,2-dihydro-5-oxo-8-(sub)-5H-thiazolo[3,2-a]quinoline-4-carboxylic acids were synthesized from 2,4-dichlorobenzoic acid and 2,4-dichloro-5-fluoroacetophenone by multi step reaction, evaluated for in vitro and in vivo antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the synthesized compds., 8-[6-[[[(1,1-dimethylethoxy)carbonyl]amino]-3-azabicyclo[3.1.0]hex-3-yl]-1,2-dihydro-7-nitro-5-oxo-5H-thiazolo[3,2-a]quinoline-4-carboxylic acid (10q) was the most active compound in vitro with MIC of 0.08 µM and <0.08 µM against MTB and MDR-TB resp. Compound 10q was 4.5 and >570 times more potent than isoniazid against MTB and MDR-TB resp. In the in vivo animal model 10q decreased the bacterial load in lung and spleen tissues with 2.51 and 3.71-log10 protections resp. at the dose of 50 mg/kg body weight  
 AN 2008:1027779 CAPLUS Full-text  
 DN 149:462071  
 TI Synthesis, antimycobacterial activities and phototoxic evaluation of 5H-thiazolo[3,2-a]quinoline-4-carboxylic acid derivatives  
 AU Dinakaran, Murugesan; Senthilkumar, Palaniappan; Yogeewari, Perumal; China, Arnab; Nagaraja, Valakunja; Sriram, Dharmarajan  
 CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute of Technology and Science, Pilani, 333031, India  
 SO Medicinal Chemistry (2008), 4(5), 482-491  
 CODEN: MCEHAJ; ISSN: 1573-4064  
 PB Bentham Science Publishers Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 149:462071  
 IT 1070905-93-9P  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (synthesis, antimycobacterial activities and phototoxic evaluation of thiazoloquinoline-carboxylic acid derivs.)  
 RN 1070905-93-9 CAPLUS  
 CN 5H-Thiazolo[3,2-a]quinoline-4-carboxylic acid, 8-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-7-fluoro-1,2-dihydro-5-oxo- (CA INDEX NAME)





OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
 RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

AB On the basis of our recent findings that 6-aminoquinolones inhibit the HIV Tat-mediated transactivation, we have designed a broad series of derivs. identifying novel potent agents such as the 6-desfluoroquinolones 24 (HM12) and 27 (HM13), which showed pronounced anti-HIV activity in acutely, chronically, and latently HIV-1 infected cell cultures. We demonstrate here that highly potent mols. can be obtained by optimizing the substituent in the various positions of the quinolone nucleus.

AN 2008:1015905 CAPLUS Full-text

DN 149:346718

TI Structure-Activity Relationship Study on Anti-HIV 6-Desfluoroquinolones

AU Tabarrini, Oriana; Massari, Serena; Daelemans, Dirk; Stevens, Miguel; Manfroni, Giuseppe; Sabatini, Stefano; Balzarini, Jan; Cecchetti, Violetta; Pannecouque, Christophe; Fravolini, Arnaldo

CS Dipartimento di Chimica e Tecnologia del Farmaco, Universita di Perugia, Perugia, 06123, Italy

SO Journal of Medicinal Chemistry (2008), 51(17), 5454-5458  
 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

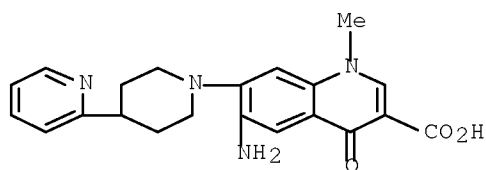
OS CASREACT 149:346718

IT 1056878-77-3P

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation and SAR of anti-HIV 6-desfluoroquinolones)

RN 1056878-77-3 CAPLUS

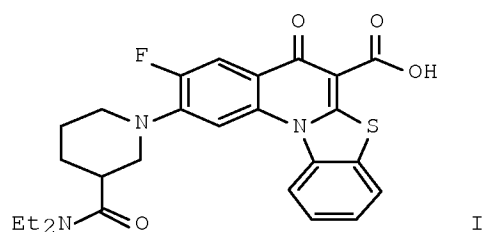
CN 3-Quinolinecarboxylic acid, 6-amino-1,4-dihydro-1-methyl-4-oxo-7-[4-(2-pyridinyl)-1-piperidinyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
 RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



I

AB Various 2-(sub)-3-fluoro/nitro-5,12-dihydro-5-oxobenzothiazolo[3,2-a]quinoline-6-carboxylic acid derivs. were synthesized from 2-aminothiophenol by a five-step reaction, evaluated for in vitro and in vivo antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multidrug resistant Mycobacterium tuberculosis (MDR-TB), and Mycobacterium smegmatis (MC2), and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the thirty-four synthesized compds., the most active compound (I) had MIC of 0.18 and 0.08  $\mu$ M in vitro against MTB and MTR-TB, resp. Compound I was found to be 2 and 570 times more potent than isoniazid against MTB and MDR-TB, resp. In the in-vivo animal model 71 decreased the bacterial load in lung and spleen tissues with 2.78 and 3.12 - log 10 protections, resp., at the dose of 50 mg/kg body weight

AN 2008:413955 CAPLUS Full-text

DN 148:580321

TI Antimycobacterial activities of novel  
 2-(sub)-3-fluoro/nitro-5,12-dihydro-5-oxobenzothiazolo[3,2-a]quinoline-6-carboxylic acid derivs.

AU Dinakaran, Murugesan; Senthilkumar, Palaniappan; Yogeewari, Perumal;  
 China, Arnab; Nagaraja, Valakunja; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute  
 of Technology and Science, Pilani, 333031, India

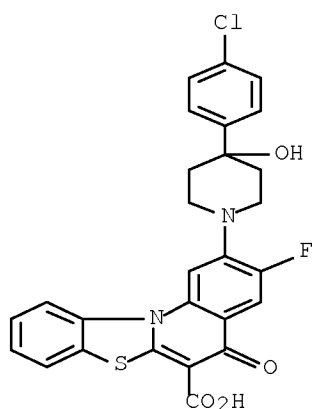
SO Bioorganic & Medicinal Chemistry (2008), 16(6), 3408-3418

CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

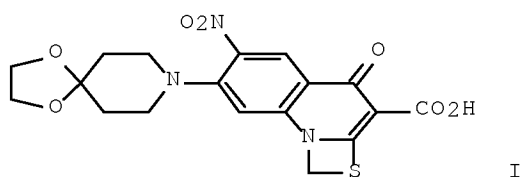
DT Journal

LA English  
 OS CASREACT 148:580321  
 IT 1028203-05-5P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (antimycobacterial activities of novel  
 2-(sub)-3-fluoro/nitro-5,12-dihydro-5-oxobenzothiazolo[3,2-a]quinoline-6-carboxylic acid derivs.)  
 RN 1028203-05-5 CAPLUS  
 CN 5H-Benzothiazolo[3,2-a]quinoline-6-carboxylic acid,  
 2-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-3-fluoro-5-oxo- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

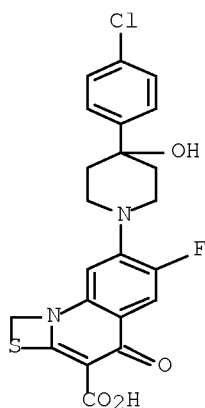
L7 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



AB Several newer 6-fluoro/nitro-4-oxo-7-(sub)-4H-[1,3]thiazeto[3,2-a]quinoline-3-carboxylic acids (10-11a-q) were synthesized from 3,4-difluoro aniline and 3-fluoro-4-nitro aniline by 9-step synthesis. The compds. were evaluated for in vitro and in vivo antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multidrug-resistant M. tuberculosis (MDR-TB) and Mycobacterium smegmatis as well as being tested for their ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the synthesized compds., 7-(1,4-dioxo-8-azaspiro[4.5]dec-8-yl)-6-nitro-4-oxo-4H-[1,3]thiazeto[3,2-a]quinoline-3-carboxylic acid (I) was the most active

compound in vitro, with MICs of 0.09  $\mu$ M and <0.09  $\mu$ M against MTB and MDR-TB, resp. I was 4-fold and >506-fold more potent than isoniazid against MTB and MDR-TB, resp. In the in vivo animal model, I decreased the bacterial load in lung and spleen tissues by 30% and 42%, resp., at a dose of 50 mg/kg body weight

AN 2008:366343 CAPLUS Full-text  
 DN 148:580312  
 TI Antimycobacterial and phototoxic evaluation of novel  
 6-fluoro/nitro-4-oxo-7-(sub)-4H-[1,3]thiazeto[3,2-a]quinoline-3-carboxylic  
 acid  
 AU Murugesan, Dinakaran; Palaniappan, Senthilkumar; Perumal, Yogeeswari;  
 Arnab, China; Valakunja, Nagaraja; Sriram, Dharmarajan  
 CS Medicinal Chemistry Research Laboratory, Pharmacy Group, Birla Institute  
 of Technology and Science (BITS), Pilani, 333031, India  
 SO International Journal of Antimicrobial Agents (2008), 31(4), 337-344  
 CODEN: IAAGEA; ISSN: 0924-8579  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 IT 1027327-22-5P  
 RL: BSU (Biological study, unclassified); PRP (Properties); PUR  
 (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (antimycobacterial and phototoxic evaluation of novel  
 6-fluoro/nitro-4-oxo-7-(sub)-4H-[1,3]thiazeto[3,2-a]quinoline-3-  
 carboxylic acids)  
 RN 1027327-22-5 CAPLUS  
 CN 1H, 4H-[1,3]Thiazeto[3,2-a]quinoline-3-carboxylic acid,  
 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-6-fluoro-4-oxo- (CA INDEX  
 NAME)



L7 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 AB Thirty-four newer 1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted secondary  
 amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids were synthesized  
 from 1,2,3,4-tetrafluoro benzene and evaluated for in vitro and in vivo  
 antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB),  
 multi-drug resistant M. tuberculosis (MDR-TB) and Mycobacterium smegmatis  
 (MC2) and also tested for the ability to inhibit the supercoiling activity of  
 DNA gyrase. Among the synthesized compds., 7-(1-(4-methoxybenzyl)-  
 3,4,5,6,7,8-hexahydroisoquinolin-2(1H)-yl)- 1-cyclopropyl-6-fluoro-1,4-  
 dihydro-8-methoxy-5-nitro-4-oxoquinoline-3- carboxylic acid (13n) was found to

be the most active compound in vitro with MIC of 0.16 and 0.33  $\mu\text{M}$  against MTB and MDR-TB, resp. In the in vivo animal model 13n decreased the bacterial load in lung and spleen tissues with 2.54 and 2.92 - log10 protections, resp., at the dose of 50 mg/kg body weight Compound 13n also inhibited the supercoiling activity of mycobacterial DNA gyrase with IC50 of 30.0  $\mu\text{g/mL}$ .

AN 2008:339599 CAPLUS Full-text

DN 148:444657

TI Synthesis and antimycobacterial evaluation of newer  
1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted secondary  
amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids

AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Banerjee, Debjani;  
Devakaram, Ruth Vandana; Yogeewari, Perumal; China, Arnab; Nagaraja,  
Valakunja; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute  
of Technology and Science, Pilani, 333031, India

SO Bioorganic & Medicinal Chemistry (2008), 16(5), 2558-2569  
CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

OS CASREACT 148:444657

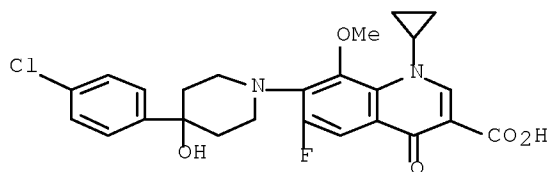
IT 1018937-82-0F

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);  
PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(synthesis of 1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted  
secondary amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids)

RN 1018937-82-0 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-4-oxo- (CA INDEX NAME)

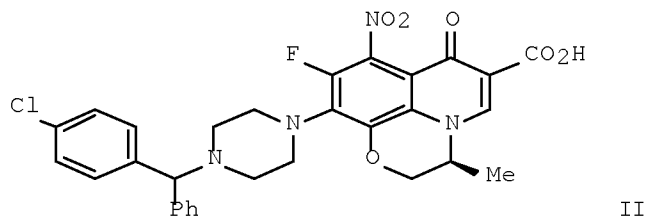
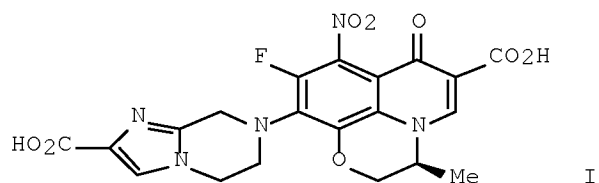


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

GI



AB Thirty derivs. of 7-oxo-7H-[1,4]oxazino[2,3,4-ij]quinoline-6-carboxylic acids were synthesized from 2,3,4,5-tetrafluoro benzoic acid and evaluated for in vitro and in vivo antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB), and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from mycobacteria. Among them, compound I was found to be the most active compound in vitro with MIC99 of 0.19  $\mu$ M and 0.09  $\mu$ M against MTB and MTR-TB, resp. In the in vivo animal model also the same compound decreased the bacterial load in lung and spleen tissues with 1.91 and 2.91 - log 10 protections, resp., at the dose of 50 mg/kg body weight Compound II was found to be the most active in the inhibition of the supercoiling activity of DNA gyrase with an IC50 of 10.0  $\mu$ g/mL. The results demonstrate the potential and importance of developing new oxazino quinolone derivs. against mycobacterial infections.

AN 2008:151718 CAPLUS [Full-text](#)

DN 148:355718

TI Novel ofloxacin derivatives: Synthesis, antimycobacterial and toxicological evaluation

AU Dinakaran, Murugesan; Senthilkumar, Palaniappan; Yogeewari, Perumal; China, Arnab; Nagaraja, Valakunja; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute of Technology and Science, Pilani, 333031, India

SO Bioorganic & Medicinal Chemistry Letters (2008), 18(3), 1229-1236  
CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Ltd.

DT Journal

LA English

OS CASREACT 148:355718

IT 1012310-46-1P

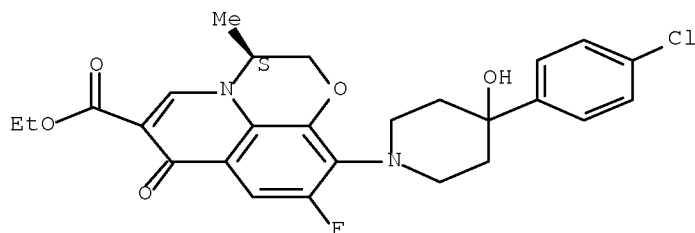
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of oxazinoquinolinecarboxylic acids starting from tetrafluorobenzoic acid using heterocyclization and amination with secondary amines as key steps, and their antibacterial activity as DNA gyrase inhibitor and toxicity)

RN 1012310-46-1 CAPLUS

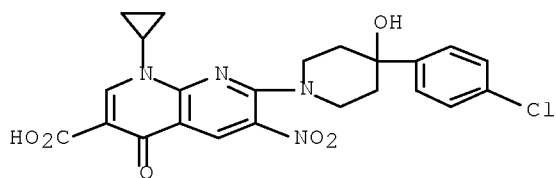
CN 7H-Pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid,  
10-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-9-fluoro-2,3-dihydro-3-methyl-7-oxo-, ethyl ester, (3S)- (CA INDEX NAME)

Absolute stereochemistry.



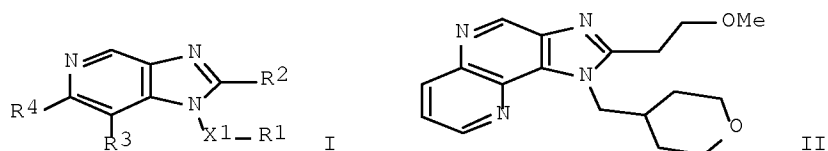
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 AB Fifty-one 1-(cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary amino)-1,8-naphthyridine-3-carboxylic acids were synthesized and evaluated for antimycobacterial in vitro and in vivo against Mycobacterium tuberculosis H37Rv (MTB), multi-drug-resistant Mycobacterium tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the synthesized compds., 1-tert-butyl-1,4-dihydro-7-(4,4-dimethyloxazolidin-3-yl)-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic acid (10q) is the most active compound in vitro with an MIC of 0.1  $\mu$ M against MTB and MDR-TB and was 3 and 455 times more potent than isoniazid against MTB and MDR-TB, resp. In the in vivo animal model 10q decreased the bacterial load in lung and spleen tissues with 2.39 and 3.89-log<sub>10</sub>protections, resp., at the dose of 50 mg/kg body weight  
 AN 2007:1215588 CAPLUS Full-text  
 DN 148:78912  
 TI Antimycobacterial Activities of Novel  
 1-(Cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary amino)-1,8-naphthyridine-3-carboxylic Acid  
 AU Sriram, Dharmarajan; Senthilkumar, Palaniappan; Dinakaran, Murugesan; Yogeewari, Perumal; China, Arnab; Nagaraja, Valakunja  
 CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute of Technology and Science, Pilani, 333031, India  
 SO Journal of Medicinal Chemistry (2007), 50(24), 6232-6239  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 148:78912  
 IT 960314-15-2F, 7-[4-(4-Chlorophenyl)-4-hydroxypiperidin-1-yl]-1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic Acid  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (antimycobacterial activities of novel  
 1-(cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary amino)-1,8-naphthyridine-3-carboxylic acids)  
 RN 960314-15-2 CAPLUS  
 CN 1,8-Naphthyridine-3-carboxylic acid,  
 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



AB Certain 1H-imidazo[4,5-c]quinolines, 6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolines, 1H-imidazo[4,5-c][1,5]naphthyridines, 6,7,8,9-tetrahydro-1H-imidazo[4,5-c][1,5]naphthyridines, and 1H-imidazo[4,5-c]pyridines substituted at the 1- and 2-positions [I; X1 = CH2, NH, O; R1 = cyclopentyl, cyclohexyl, cyclopentyl, etc.; R2 = NH2, Me, CH2(alkyl), etc.; R3 and R4 taken together form (un)substituted fused benzene or pyridine ring], useful as immunomodulators, were prepared E.g., a multi-step synthesis of II, starting from 4-hydroxy-3-nitro[1,5]naphthyridine, was given. Pharmaceutical compns. containing compds. I, methods of making these compds., and methods of use of these compds. as immunomodulators, for inducing cytokine biosynthesis in animals and in the treatment of diseases including viral and neoplastic diseases, are disclosed.

AN 2007:729369 CAPLUS Full-text  
 DN 147:143425

TI Preparation of substituted imidazoquinolines, imidazonaphthyridines, and imidazopyridines for inducing cytokine biosynthesis

IN Merrill, Bryon A.; Haraldson, Chad A.; Prince, Ryan B.; Manske, Karl J.; Kshirsagar, Tushar A.; Heppner, Philip D.; Dressel, Luke T.; Krepski, Larry R.; Rice, Michael J.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 209pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007075468	A1	20070705	WO 2006-US48017	20061215
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,			



GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,  
 KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,  
 MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,  
 RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

			US 2005-751392P	P	20051216
AU 2006332000	A1	20070705	AU 2006-332000		20061215
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
CA 2634017	A1	20070705	CA 2006-2634017		20061215
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
EP 1968587	A1	20080917	EP 2006-845602		20061215
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,		IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR		
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
JP 2009519955	T	20090521	JP 2008-545861		20061215
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
IN 2008DN04982	A	20080808	IN 2008-DN4982		20080610
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
ZA 2008005105	A	20090624	ZA 2008-5105		20080611
			US 2005-751392P	P	20051216
KR 2008077982	A	20080826	KR 2008-714349		20080613
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
CN 101330916	A	20081224	CN 2006-80047491		20080616
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
MX 2008007864	A	20090304	MX 2008-7864		20080616
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215
NO 2008002757	A	20080904	NO 2008-2757		20080618
			US 2005-751392P	P	20051216
			WO 2006-US48017	W	20061215

OS MARPAT 147:143425

IT 943629-90-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(preparation of substituted imidazoquinolines, imidazonaphthyridines, and  
 imidazopyridines for inducing cytokine biosynthesis)

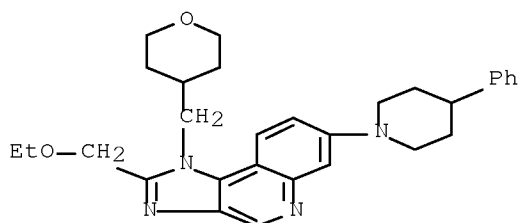
RN 943629-90-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinoline, 2-(ethoxymethyl)-7-(4-phenyl-1-piperidinyl)-1-  
 [(tetrahydro-2H-pyran-4-yl)methyl]-, 2,2,2-trifluoroacetate (1:?) (CA  
 INDEX NAME)

CM 1

CRN 943629-89-8

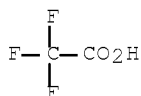
CMF C30 H36 N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

AB Substituted pyridines and pyrimidines and compns. contg. them are claimed for the treatment of acute, inflammatory and neuropathic pain, dental pain, general headache, migraine, cluster headache, mixed-vascular and non-vascular syndromes, tension headache, general inflammation, arthritis, rheumatic diseases, osteoarthritis, inflammatory bowel disorders, inflammatory eye disorders, inflammatory or unstable bladder disorders, psoriasis, skin complaints with inflammatory components, chronic inflammatory conditions, inflammatory pain and associated hyperalgesia and allodynia, neuropathic pain and associated hyperalgesia and allodynia, diabetic neuropathy pain, causalgia, sympathetically maintained pain, deafferentation syndromes, asthma, epithelial tissue damage or dysfunction, herpes simplex, disturbances of visceral motility at respiratory, genitourinary, gastrointestinal or vascular regions, wounds, burns, allergic skin reactions, pruritus, vitiligo, general gastrointestinal disorders, gastric ulceration, duodenal ulcers, diarrhea, gastric lesions induced by necrotizing agents, hair growth, vasomotor or allergic rhinitis, bronchial disorders or bladder disorders. Example compound 4-(4-tert-butylphenyl)-1-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)pyridin-2(1H)-one was prepared by reacting 4-(4-tert-butylphenyl)pyridin-2(1H)-one and 1-bromo-3,4-(ethylenedioxy)benzene. No biol. data is given in the patent.

AN 2007:701137 CAPLUS Full-text

DN 147:118146

TI Preparation of substituted pyridines and pyrimidines as vanilloid receptor ligands for treatment of pain, inflammatory conditions, and other diseases

IN Chen, Ning; Nishimura, Nobuko; Norman, Mark H.; Ognyanov, Vassil I.; Ognyanov, Diana

PA Amgen, Inc., USA

SO U.S. Pat. Appl. Publ., 51 pp.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070149513	A1	20070628	US 2006-644226	20061222
				US 2005-753994P	P 20051223
	WO 2007076104	A1	20070705	WO 2006-US49208	20061222
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
				US 2005-753994P	P 20051223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 147:118146

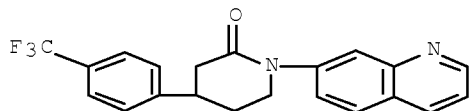
IT 942947-13-9P, 1-(Quinolin-7-yl)-4-[4-(trifluoromethyl)phenyl]piperidin-2-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted pyridines and pyrimidines as vanilloid receptor ligands for treatment of pain, inflammatory conditions, and other diseases)

RN 942947-13-9 CAPLUS

CN 2-Piperidinone, 1-(7-quinolinyl)-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



L7 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

AB Quadruplex nucleotide sequences and methods for identifying interacting mols. are provided. The quadruplex sequences comprise C-rich or G-rich sequences from human genomic DNA and may conform to the motif ((G3+)N1-7)3G3+ or ((C3+)N1-7)3C3+, where "3+" is three or more nucleotides, C is cytosine, G is guanine, and N is any nucleotide. The method for identifying quinoline or porphyrin derivs. that bind to human nucleic acid containing a quadruplex structure or displace a protein from a nucleic acid comprises: (1) contact the nucleic acid and a compound that binds to the nucleic acid with a test mol.; and (2) detecting the amount of the compound bound or not bound to the nucleic acid. The test mol. is identified as a mol. that binds to the nucleic acid containing the human nucleotide sequence when less of the compound binds to the nucleic acid in the presence of the test mol. than in the absence of the test mol. The invention also identifies 1450 quinolone derivs. that bind to quadruplex DNA or RNA sequences. Identifying modulators of nucleic acid synthesis is achieved in a system containing template nucleic acid, primer oligonucleotides, and DNA polymerase or RNA polymerase.

AN 2007:538440 CAPLUS Full-text

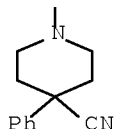
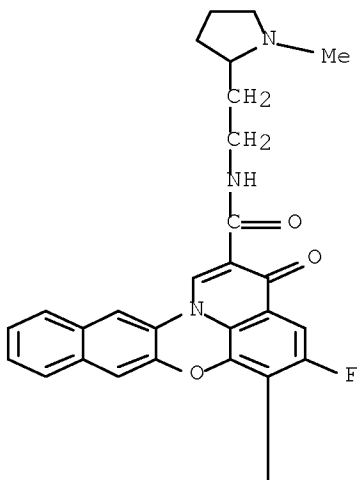
DN 147:3133

TI Targeting quadruplex sequences in human nucleic acids by identifying  
 interacting quinoline and porphyrin derivatives  
 IN O'Brien, Sean; Siddiqui-Jain, Adam  
 PA Cylene Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 219pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007056113	A2	20070518	WO 2006-US42906	20061102
	WO 2007056113	A9	20090305		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
				US 2005-732531P	P 20051102
				US 2005-735686P	P 20051110
	US 20090291437	A1	20091126	US 2008-92557	20080731
				US 2005-732531P	P 20051102
				US 2005-735686P	P 20051110
				WO 2006-US42906	W 20061102

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

IT 783361-00-2  
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (targeting quadruplex sequences in human nucleic acids by identifying interacting quinoline and porphyrin derivs.)  
 RN 783361-00-2 CAPLUS  
 CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide,  
 6-(4-cyano-4-phenyl-1-piperidinyl)-5-fluoro-N-[2-(1-methyl-2-pyrrolidinyl)ethyl]-3-oxo- (CA INDEX NAME)



L7 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR<sub>1</sub>R<sub>2</sub>; A = H, F, N(R<sub>1</sub>)<sub>2</sub>; Z = O, S, NR<sub>1</sub>, CH<sub>2</sub>; U = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>; X = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>, halo, azido, SR<sub>2</sub>; R<sub>1</sub> and R<sub>2</sub> in NR<sub>1</sub>R<sub>2</sub> may form a double bond or ring; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R<sub>2</sub> = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted (hetero)aryl which may be monocyclic or fused with a single or multiple ring and optionally containing a heteroatom; R<sub>5</sub> = H, OR<sub>2</sub>, alkyl, alkenyl, etc.] or II [V, A, X, Z, and U are as defined above; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful in screening and for inducing apoptosis. Over forty synthetic examples showed the synthesis of intermediates and target compds. E.g., a multi-step synthesis of the amide III, starting from 2,3,4,5-tetrafluorobenzoic acid, was given. The title compds. were tested in various tests. For example, they were tested in a stop assay, a high throughput, first-pass screen detecting drugs that bind to and stabilize the target G-quadruplex. E.g., the compound III exhibits approx. 400x selectivity for the c-Myc quadruplex relative to pUC

18 plasmid DNA. III was also tested for antitumor activity (biol. data given). The pharmaceutical composition comprising the compds. I or II is disclosed.

AN 2006:120542 CAPLUS Full-text  
 DN 144:212787  
 TI Preparation of substituted quinobenzoxazine analogs as antitumor agents  
 IN Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran, Terence  
 PA Cylene Pharmaceuticals, Inc., USA  
 SO U.S. Pat. Appl. Publ., 558 pp., Cont.-in-part of U.S. Ser. No. 903,975.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 3

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

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IT 783361-00-2P

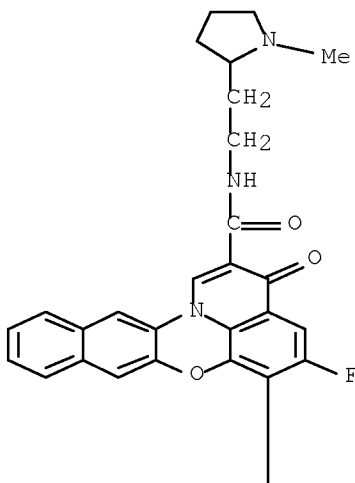
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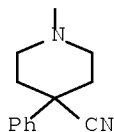
(preparation of substituted quinobenzoxazine analogs as antitumor agents)

RN 783361-00-2 CAPLUS

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PAGE 1-A





OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to a prepn. of quinoline and [1,8]naphthyridine derivs. of formula I [wherein: A is (cyclo)alkylene, alk(en/yn)ylene, or heteroarylene, etc.; Q is N, C(OH), or heteroalkyl, etc.; X is N, CH, C(F), C(OH), or C(NH<sub>2</sub>), etc.; Y is N, CH, or C(OMe), etc.; Z and L are independently (CH<sub>2</sub>)<sub>1-3</sub>; R<sub>1</sub> is H, halogen, or NH<sub>2</sub>, etc.; R<sub>2</sub> is H, F, or Cl; R<sub>3</sub> is H, (cyclo)alkyl, alk(en/yn)yl, or (hetero)aryl, etc.; R<sub>4</sub> is a derivative of oxazole, furan, or isoxazole], useful as antimicrobial agents (no biol. data). The invention compds. are effective against a variety of multi-drug resistant bacteria. For instance, [1,8]naphthyridine derivative II was prepared via amination of 7-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-[1,8]naphthyridine-3-carboxylic acid by piperidine derivative III with a yield of 64%.

AN 2005:570890 CAPLUS Full-text

DN 143:97344

TI A preparation of quinoline and [1,8]naphthyridine derivatives, useful as antibiotics

IN Hubschwerlen, Christian; Specklin, J. L.; Baeschlin, Daniel Kaspar; Sigwalt, Christine; Mueller, Stefan; Cappi, Michael

PA Morphochem A.-G., Germany

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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MR, NE, SN, TD, TG

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FAN 2004:965064

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 143:97344; MARPAT 143:97344

IT 856677-21-9P

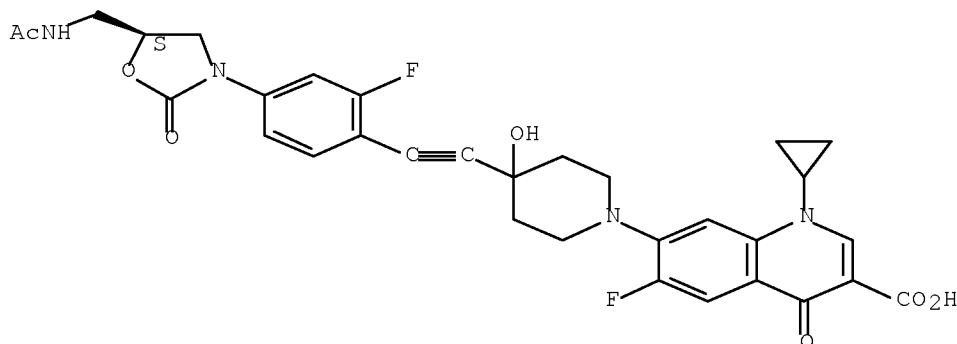
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinoline and [1,8]naphthyridine derivs. useful as antibiotics)

RN 856677-21-9 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-[2-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]ethynyl]-4-hydroxy-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR<sub>1</sub>R<sub>2</sub>; A = H, F, N(R<sub>1</sub>)<sub>2</sub>; Z = O, S, NR<sub>1</sub>, CH<sub>2</sub>; U = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>; X = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>, halo, azido, SR<sub>2</sub>; R<sub>1</sub> and R<sub>2</sub> in NR<sub>1</sub>R<sub>2</sub> may form a double bond or ring; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R<sub>2</sub> = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-myc mRNA levels at 4  $\mu$ M. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

AN 2005:349002 CAPLUS Full-text

DN 142:373851

TI Preparation of substituted quinobenzoxazine analogs as antitumor agents

IN Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran, Terence

PA USA

SO U.S. Pat. Appl. Publ., 453 pp., Cont.-in-part of U.S. Ser. No. 821,243.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

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PATENT FAMILY INFORMATION:

FAN 2004:902098

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OS MARPAT 142:373851

IT 783361-00-2P

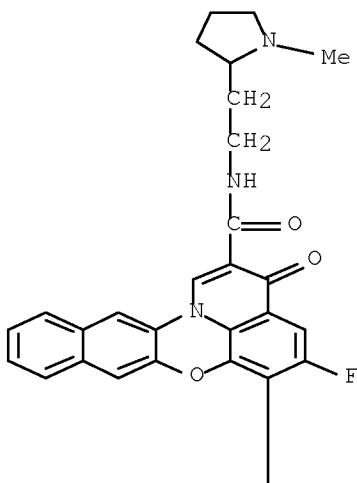
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(preparation of substituted quinobenzoxazine analogs as antitumor agents)

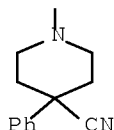
RN 783361-00-2 CAPLUS

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PAGE 1-A



PAGE 2-A



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR<sub>1</sub>R<sub>2</sub>; A = H, F, N(R<sub>1</sub>)<sub>2</sub>; Z = O, S, NR<sub>1</sub>, CH<sub>2</sub>; U = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>; X = OR<sub>2</sub>, NR<sub>1</sub>R<sub>2</sub>, halo, azido, SR<sub>2</sub>; R<sub>1</sub> and R<sub>2</sub> in NR<sub>1</sub>R<sub>2</sub> may form a double bond or ring; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R<sub>2</sub> = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay

and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-myc mRNA levels at 4  $\mu$ M. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

AN 2004:902098 CAPLUS Full-text  
 DN 141:395565  
 TI Preparation of substituted quinobenzoxazine analogs as antitumor agents  
 IN Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran, Terrance  
 PA Cyclene Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 438 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

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PI	WO 2004091504	A2	20041028	WO 2004-US11108	20040407
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## PATENT FAMILY INFORMATION:

FAN 2005:349002

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FAN	2006:120542				
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			US 2006-390810	A3	20060328

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 141:395565

IT 783361-00-2P

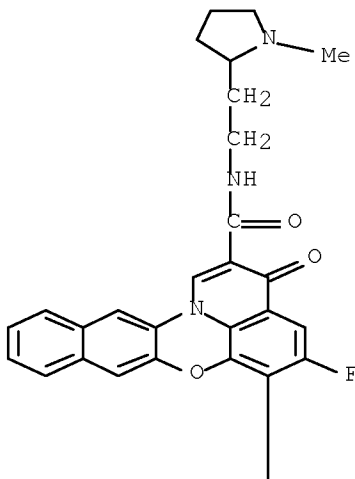
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(Uses)

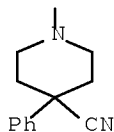
(preparation of substituted quinobenzoxazine analogs as antitumor agents)

RN 783361-00-2 CAPLUS

CN 3H-Benzo[b]pyrido[3,2,1-kl]phenoxazine-2-carboxamide,  
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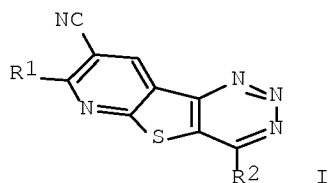
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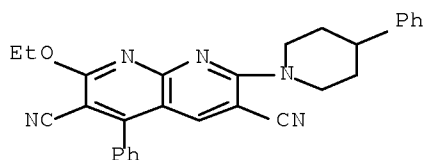
L7 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



AB New antiprotozoals active against *Philasterides dicentrarchi*, the causative agent of scuticociliatosis in farmed turbot and Black Sea bass-bream, have been synthesized and tested. The most active compds. possess a piperazine ring, generally N-bonded to the heterocycle, and are 1,8-naphthyridine, pyridothienopyrimidine, and pyridothienotriazine derivs. The pyridothienotriazine I (R1 = 4-methylpiperidino, R2 = 1-piperazinyl) presents the same activity (LD = 0.8/1.5 mg L<sup>-1</sup>) as the well-known antiparasitics niclosamide and oxyclozanide.

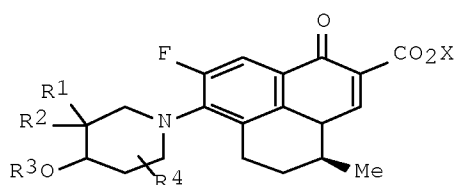
AN 2003:236103 CAPLUS Full-text  
 DN 139:197457  
 TI Piperazine N-substituted naphthyridines, pyridothienopyrimidines and pyridothienotriazines: new antiprotozoals active against *Philasterides dicentrarchi*  
 AU Quintela, Jose M.; Peinador, Carlos; Gonzalez, Liliana; Iglesias, Raul; Parama, Anabel; Alvarez, Francisca; Sanmartin, Manuel L.; Riguera, Ricardo  
 CS Facultad de Ciencias, Departamento de Quimica Fundamental e Industrial, Universidad de La Coruna, La Coruna, 15071, Spain  
 SO European Journal of Medicinal Chemistry (2003), 38(3), 265-275  
 CODEN: EJMCA5; ISSN: 0223-5234  
 PB Editions Scientifiques et Medicales Elsevier  
 DT Journal  
 LA English  
 OS CASREACT 139:197457  
 IT 583051-27-8P  
 RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of piperazinyl-substituted naphthyridines, pyridothienopyrimidines, and pyridothienotriazines as antiprotozoals active against *Philasterides dicentrarchi*)

RN 583051-27-8 CAPLUS  
 CN 1,8-Naphthyridine-3,6-dicarbonitrile,  
 2-ethoxy-4-phenyl-7-(4-phenyl-1-piperidinyl)- (CA INDEX NAME)



OSC.G 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)  
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 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



I

AB Title compds. (I; X = H, alkyl, aralkyl, acetoxymethyl, pivaloyloxymethyl, heterocyclalkyl, etc.; R1, R2 = H, alkyl, aralkyl, aminoalkyl, trifluoroalkyl, halo; R3 = H, alkyl, glycosyl, aralkyl, alkanoyl, aminoalkanoyl; R4 = H, alkyl, CF3, Ph, F, etc.), were prepared Thus, diacetoxymethyl-[(S)-8,9-difluoro-5-methyl-6,7-dihydro-5-methyl-1-oxo-1H,5H-benzo[i,j]quinolizine-2-carboxy]borane, 4-hydroxy-4-trifluoromethylpiperidine, and Et3N were heated in Me2SO at 120° for 20 h to give 80% (S)-9-fluoro-6,7-dihydro-8-(4-hydroxy-4-trifluoromethylpiperidin-1-yl)-5-methyl-1-oxo-1H,5H-benzo[i,j]quinolizine-2-carboxylic acid. Tested I showed min. inhibitory concns. of 0.1-0.8 µg/mL against S. pneumoniae.

AN 2001:833316 CAPLUS Full-text

DN 135:371757

TI Preparation of chiral 8-piperidinobenzo[i,j]quinolizines as antibacterials.

IN De Souza, Noel John; Patel, Mahesh Vitalbhai; Agarwal, Shiv Kumar; Gupte, Shrikant Vinayak; Upadhyay, Dilip Jatashankar; Bhawsar, Satish Baliram; Jafri, Mohammad Alam; Khorakiwala, Habil F.

PA India

SO PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001085728	A2	20011115	WO 2001-IN100	20010508

WO 2001085728	A3	20020912		
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			US 1999-170676P	P	19991214
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FAN 2000:814485

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FAN 2001:833024

PATENT NO. KIND DATE APPLICATION NO. DATE

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			WO 2001-IN100	A	20010508
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			US 2001-850669	A	20010507
			WO 2001-IN100	A	20010508
			WO 2001-IN139	W	20010731

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			WO 2001-IN139	W 20010731
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			US 2001-287104P	P	20010427
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				US 2002-128996	A	20020423
				WO 2002-IN111	A	20020424
				WO 2002-IN232	W	20021212
JP 2005511743	T	20050428		JP 2003-551131		20021212
				US 2001-341165P	P	20011213
				US 2002-128996	A	20020423
				WO 2002-IN111	A	20020424
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IN 2004MN00274	A	20050429		IN 2004-MN274		20040512
				WO 2002-IN232	W	20021212
FAN 2003:912885						
PATENT NO.	KIND	DATE		APPLICATION NO.		DATE
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PI US 20030216568	A1	20031120		US 2002-318367		20021212
US 6878713	B2	20050412				
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				US 2002-128996	A2	20020423
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US 20020177559	A1	20021128		US 2001-919347		20010731
US 7098219	B2	20060829				
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US 20030096812	A1	20030522		US 2002-128996		20020423
US 6964966	B2	20051115				
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WO 2002085886	A3	20030522				
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW					
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
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US 20050065164	A1	20050324		US 2004-945504		20040920
US 7393957	B2	20080701				
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				WO 2002-IN111	A	20020424
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US 20080214608	A1	20080904		US 2008-150075		20080424
US 7626032	B2	20091201				

FAN	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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				US 2004-945504	A3 20040920
FAN	2004:485161				
PI	US 6750224	B1	20040615	US 2000-640947	20000817
				US 1999-170676P	P 19991214
				US 2000-566875	A2 20000508
	US 20030207908	A1	20031106	US 2000-566875	20000508
	US 7247642	B2	20070724		
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				US 2000-566875	A 20000508
				US 2000-640947	A 20000817
				WO 2000-IN111	A 20001122
				US 2001-802793	A 20010309
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				US 2000-640947	A 20000817
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				US 2000-640947	A 20000817
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				US 2001-802793	A 20010309
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				US 2000-640947	A 20000817
				WO 2000-IN111	W 20001122
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	CA 2417799	A1	20020207	CA 2001-2417799	20010731

			US 2000-222201P	P	20000801
			US 2000-640947	A	20000817
			WO 2000-IN111	A	20001122
			US 2001-286291P	P	20010425
			US 2001-850669	A	20010507
			WO 2001-IN100	A	20010508
			WO 2001-IN139	W	20010731
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			RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,		
			UZ, VN, YU, ZA, ZW		
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,		
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			BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
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			US 2001-850669	A	20010507
			WO 2001-IN100	A	20010508
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			US 2000-222201P	P	20000801
			US 2000-640947	A	20000817
			WO 2000-IN111	A	20001122
			US 2001-286291P	P	20010425
			US 2001-850669	A	20010507
			WO 2001-IN100	W	20010508
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EP 1305048	A2	20030502	EP 2001-958373		20010731
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US 20030144517	A1	20030731	US 2002-303692		20021122
US 6753333	B2	20040622			
			US 1999-170676P	P	19991214
			US 2000-566875	A2	20000508
			US 2000-640947	A1	20000817
			WO 2000-IN111	A	20001122
			US 2001-802793	A3	20010309
IN 2003MN00128	A	20060616	IN 2003-MN128		20030127
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			US 2000-640947	A	20000817
			WO 2000-IN111	A	20001122
			US 2001-286291P	P	20010425
			US 2001-850669	A	20010507
			WO 2001-IN100	A	20010508
			WO 2001-IN139	W	20010731
US 20080044466	A1	20080221	US 2007-804770		20070521
			WO 1999-IN16	A	19990507
			US 1999-170676P	P	19991214

US 20080108646	A1	20080508	US 2000-566875	A3 20000508
			US 2007-880645	20070723
			WO 1999-IN16	A 19990507
			US 1999-170676P	P 19991214
			US 2000-566875	A1 20000508

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 135:371757

IT 373603-57-7F

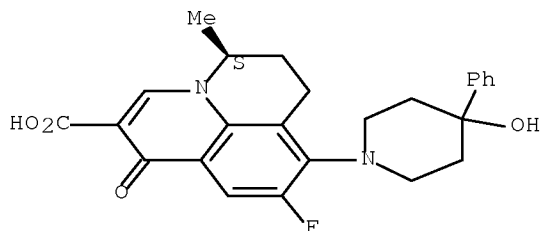
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of chiral piperidinobenzoquinolizines as antibacterials)

RN 373603-57-7 CAPLUS

CN 1H,5H-Benzo[ij]quinolizine-2-carboxylic acid,  
9-fluoro-6,7-dihydro-8-(4-hydroxy-4-phenyl-1-piperidinyl)-5-methyl-1-oxo-,  
(5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



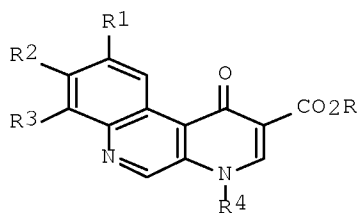
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

GI



I

AB Title compds. [I; R = H; 1 of R1-R3 = NR5R6, 1 = halo, and the other = H, halo, NR5R6; R4 = (fluoro)alkyl, carboxyalkyl, cycloalkyl, (di)fluorophenyl, alkoxy, alkylamino; NR5R6 = heterocyclyl] were prepared as bactericides (no data). Thus, 2-amino-4-chloro-3,5-difluorobenzaldehyde (preparation given) was cyclocondensed with O2NCH2CH:NOH and the reduced product condensed with EtOCH:C(CO2Et)2 to give, after cyclization and N-methylation, I (R2 = Cl, R3 = F, R4 = Me) (II; R = Et, R1 = F) which was aminated by 1-(3-fluoro-4-

methylphenyl)piperazine to give, after saponification, II [R = H, R1 = 4-(3-fluoro-4-methylphenyl)-1-piperazinyl].

AN 2001:31500 CAPLUS Full-text

DN 134:100855

TI Preparation of 1-oxobenzo[f][1,7]naphthyridine-2-carboxylic acids as bactericides

IN Desconclois, Jean-Francois; Genevois-Borella, Arielle; Girard, Philippe; Kryvenko, Michel; Lavergne, Marc Pierre; Malleron, Jean-Luc; Picaut, Guy; Tabart, Michel; Wentzler, Sylvie

PA Aventis Pharma S.A., Fr.

SO PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002396	A1	20010111	WO 2000-FR1819	20000629
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
	FR 2795729	A1	20010105	FR 1999-8376	19990630
	EP 1189903	A1	20020327	EP 2000-949571	20000629
	EP 1189903	B1	20030528		
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				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
				WO 2000-FR1819	W 20000629
JP	2003503495	T	20030128	JP 2001-507833	20000629
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				US 1999-148212P	P 19990812
				WO 2000-FR1819	W 20000629
AT	241624	T	20030615	AT 2000-949571	20000629
				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
				WO 2000-FR1819	W 20000629
PT	1189903	E	20031031	PT 2000-949571	20000629
				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
ES	2200899	T3	20040316	ES 2000-949571	20000629
				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
US	20020137741	A1	20020926	US 2001-29950	20011231
US	6566362	B2	20030520		
				FR 1999-8376	A 19990630
				US 1999-148212P	P 19990812
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 134:100855

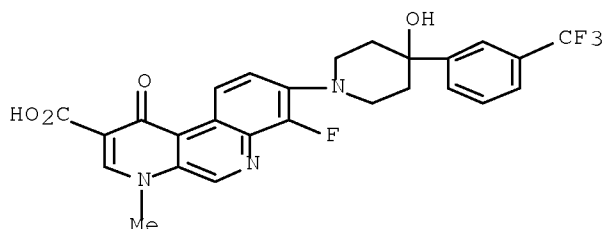
IT 318683-88-4F

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 1-oxobenzo[f][1,7]naphthyridine-2-carboxylic acids as  
bactericides)

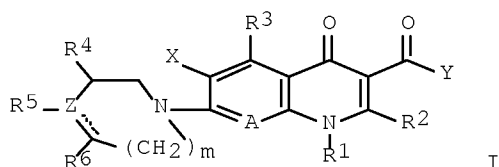
RN 318683-88-4 CAPLUS

CN Benzo[f][1,7]naphthyridine-2-carboxylic acid,  
7-fluoro-1,4-dihydro-8-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-  
piperidinyl]-4-methyl-1-oxo- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
GI



AB Cytokine formation inhibitors contain (I; R1 = C1-6 alkyl; R2, R3, R4, R6 = H, etc.; R5 = halogen, etc.; X = H, etc.; A = N, etc.; m = 2 or 3; Y = Oh; Z = C, etc.) and their salts for treatment of cytokines-related diseases. The cytokines include IL-1 to IL-15, TNF- $\alpha$ , M-CAF, RANTES, MIP-1, SCF, GM-CSF, G-CSF, M-CSF, erythropoietin, thrombopoietin, interferon, NGF, TGF- $\beta$ , PDGF, EGF, and LIF.

AN 1999:380682 CAPLUS Full-text

DN 131:68133

TI Cytokine formation inhibitors for treatment of cytokines-related diseases

IN Baba, Masanori; Ikeuchi, Kiyoshi; Kimura, Yoichi

PA Daiichi Seiyaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

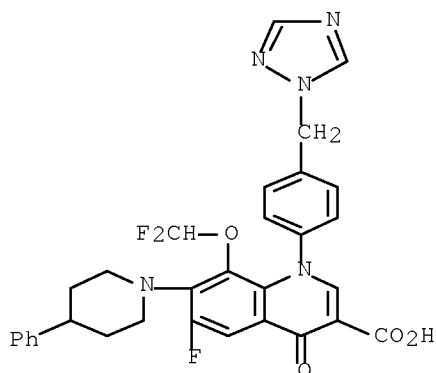
LA Japanese

FAN.CNT 1

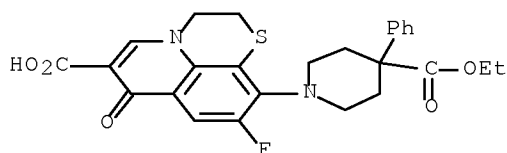
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 11158071 A 19990615 JP 1997-331575 19971202  
 JP 3739916 B2 20060125  
 IT 228548-93-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (cytokine formation inhibitors for treatment of cytokines-related  
 diseases)  
 RN 228548-93-4 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 8-(difluoromethoxy)-6-fluoro-1,4-dihydro-4-oxo-  
 7-(4-phenyl-1-piperidinyl)-1-[4-(1H-1,2,4-triazol-1-ylmethyl)phenyl]- (CA  
 INDEX NAME)

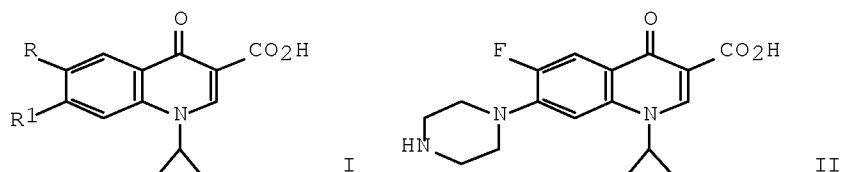


L7 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
 AB Seven analogs of tricyclic rufloxacin were prepd. and their MIC were evaluated  
 against 13 kinds of bacteria. One of the compds. had better antibacterial  
 activity than rufloxacin in vitro.  
 AN 1999:74954 CAPLUS Full-text  
 DN 130:332303  
 TI Synthesis and antibacterial activity of tricyclic fluoroquinolones  
 AU Xiong, Wennan; Wang, Erhua; Tang, Zhiyue  
 CS Medicinal and Chemical Engineering Institute, China Pharmaceutical  
 University, Nanjing, 210009, Peop. Rep. China  
 SO Zhongguo Yaowu Huaxue Zazhi (1998), 8(3), 174-177  
 CODEN: ZYHZEJ; ISSN: 1005-0108  
 PB Zhongguo Yaowu Huaxue Zazhi Bianjibu  
 DT Journal  
 LA Chinese  
 IT 224313-58-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (preparation and antibacterial activity of tricyclic fluoroquinolones)  
 RN 224313-58-0 CAPLUS  
 CN 7H-Pyrido[1,2,3-de]-1,4-benzothiazine-6-carboxylic acid,  
 10-[4-(ethoxycarbonyl)-4-phenyl-1-piperidinyl]-9-fluoro-2,3-dihydro-7-oxo-  
 (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN  
GI



AB The title compds. [I; R = H, Br, Cl, F, NO<sub>2</sub>; R<sub>1</sub> = H, Cl, F, R<sub>2</sub>R<sub>3</sub>N; R<sub>2</sub>, R<sub>3</sub> = alkyl, hydroxyalkyl; R<sub>2</sub>R<sub>3</sub>N = (un)substituted heterocyclyl] (89 compds.) were prepared Thus, CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> underwent Grignard benzoylation with 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COCl to give 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COCH(CO<sub>2</sub>Et)<sub>2</sub>. This was decarboxylated and condensed with HC(OEt)<sub>3</sub> to give 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COC(:CHOEt)CO<sub>2</sub>Et which was treated with cyclopropylamine and cyclized to give I (R = F, R<sub>1</sub> = Cl). This was treated with piperazine to give II.HCl. On rice plants 0.025% II.HCl gave 80% protection against damage by Xanthomonas oryzae.

AN 1984:611165 CAPLUS Full-text

DN 101:211165

OREF 101:31999a,32002a

TI Microbicidal composition based on quinolonecarboxylic acid

IN Grohe, Klaus; Petersen, Uwe; Kuck, Karl Heinz

PA Bayer A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 60 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 3248507	A1	19840705	DE 1982-3248507	19821229
	US 4563459	A	19860107	US 1983-561441	19831214
				DE 1982-3248507	A 19821229
	EP 113091	A1	19840711	EP 1983-112720	19831217
	EP 113091	B1	19860730		
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	AT 21011	T	19860815	AT 1983-112720	19831217
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				EP 1983-112720	A 19831217
	AU 8322863	A	19840705	AU 1983-22863	19831223
	AU 563747	B2	19870723		
				DE 1982-3248507	A 19821229
	CA 1232198	A1	19880202	CA 1983-444242	19831223

IL 70540	A	19870731	DE 1982-3248507	A	19821229
BR 8307166	A	19840807	IL 1983-70540		19831226
DK 8306038	A	19840630	DE 1982-3248507	A	19821229
ZA 8309647	A	19840829	BR 1983-7166		19831227
HU 32709	A2	19840928	DE 1982-3248507	A	19821229
HU 194482	B	19880229	DK 1983-6038		19831228
JP 59130802	A	19840727	DE 1982-3248507	A	19821229
			ZA 1983-9647		19831228
			DE 1982-3248507	A	19821229
			HU 1983-4498		19831228
			DE 1982-3248507	A	19821229
			JP 1983-252506		19831229
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

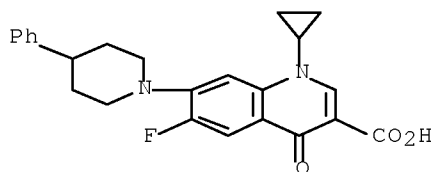
OS CASREACT 101:211165; MARPAT 101:211165

IT 93106-79-7F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 93106-79-7 CAPLUS

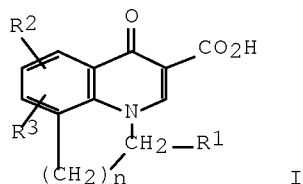
CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(4-phenyl-1-piperidinyl)- (CA INDEX NAME)



OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L7 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

GI



AB Benzoheterocyclic compds. I (R1 = H or alkyl; R2 = H or halogen; R3 = 1-pyrrolidinyl, 1,2,5,6-tetrahydro-1-pyridyl, 1-piperazinyl, etc., n = 1 or 2) are antimicrobial agents. Thus, 9-fluoro-8-(4-hydroxy-1-piperidyl)-5-methyl-6,7-dihydro-1-oxo-1H,5H- benzo[ij] quinalizine-2-carboxylic acid (I; R1 = Me, R2 = 9-F, R3 = 8-(4-hydroxypiperidino), n = 2)(II) [81962-84-7] was prepared by treating 9-fluoro-8-(bromo-5-methyl-6,7-dihydro-1-oxo-1H,5H- benzo[ij]quinalizine-2- carboxylic acid [77483-92-2] with 4-hydroxypiperidine [5382-16-1]. An ointment was prepared by mixing II Na salt [86826-12-2] 2, lanolin 5, beeswax 5, and white vaseline 88 g. Forty-two I were synthesized

and their activities against 41 species of bacteria such as Escherichia coli, Bacillus cereus, Staphylococcus aureus, etc. were shown.

AN 1983:493740 CAPLUS Full-text

DN 99:93740

OREF 99:14385a,14388a

TI Benzoquinolizines and pyrroloquinolines antimicrobial agents

PA Otsuka Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 35 pp.

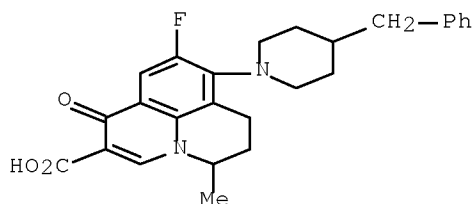
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

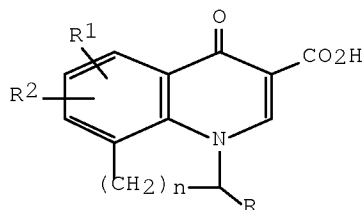
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 58090511	A	19830530	JP 1981-189806	19811125
	JP 01041127	B	19890904		
				JP 1981-189806	19811125
IT	81962-88-1F				
	RL: THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);				
	USES (Uses)				
	(preparation of, as bactericide)				
RN	81962-88-1 CAPLUS				
CN	1H,5H-Benzo[ij]quinolizine-2-carboxylic acid,				
	9-fluoro-6,7-dihydro-5-methyl-1-oxo-8-[4-(phenylmethyl)-1-piperidinyl]-				
	(CA INDEX NAME)				



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L7 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2010 ACS on STN

GI



I

AB Quinolinones I [n = 1, 2; R = H, alkyl; R1 = H, halogen; R2 = (un)substituted pyrrolidino, tetrahydropyrido, piperidino, morpholino, piperazino] were prepared Thus 1.05 g I [n = 2, R = Me, R1 = 9-F, R2 = 8-(4-

hydroxypiperidino), II] was obtained by reaction of 7.5 g I (n = 2, R = Me, R1 = 9-F, R2 = 8-Br) with 9.5 g 4-piperidinol. I had a min. inhibitory concentration against Escherichia coli NIHJ JC-2 of 0.39 µg/mL.

AN 1982:406177 CAPLUS Full-text

DN 97:6177

OREF 97:1191a,1194a

TI Benzoheterocyclic compounds used as antimicrobial medicines

IN Ishikawa, Hiroshi; Nakagawa, Kazuyuki; Uno, Testuyuki; Kano, Masanobu

PA Otsuka Pharmaceutical Co., Ltd. , Japan

SO Belg., 83 pp.

CODEN: BEXXAL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	BE 891046	A1	19820301	BE 1981-206483	19811109
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	JP 57081486	A	19820521	JP 1980-158652	19801110
	JP 01007996	B	19890210		
	JP 57176987	A	19821030	JP 1981-63170	19810424
	JP 02022074	B	19900517		
	NO 8103726	A	19820511	NO 1981-3726	19811104
	NO 156828	B	19870824		
	NO 156828	C	19871202		
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	AT 8104748	A	19920215	AT 1981-4748	19811105
	AT 395150	B	19920925		
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	DK 8104952	A	19820511	DK 1981-4952	19811109
	DK 160940	B	19910506		
	DK 160940	C	19911021		
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	FI 8103526	A	19820511	FI 1981-3526	19811109
	FI 71141	B	19860814		
	FI 71141	C	19861124		
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	SE 8106642	A	19820614	SE 1981-6642	19811109
	SE 448542	B	19870302		
	SE 448542	C	19870611		
				JP 1980-158652	A 19801110
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	DE 3144455	A1	19820624	DE 1981-3144455	19811109
	DE 3144455	C2	19901004		
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	ZA 8107733	A	19821027	ZA 1981-7733	19811109
				JP 1980-158652	A 19801110
	SU 1366055	A3	19880107	SU 1981-3354800	19811109
				JP 1980-158652	A 19801110
				JP 1981-63170	A 19810424
	DE 3153221	C2	19910704	DE 1981-3153221	19811109
				JP 1981-63170	A 19810424
	FR 2493849	A1	19820514	FR 1981-21100	19811110
	FR 2493849	B1	19841228		

			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
GB 2086905	A	19820519	GB 1981-33890		19811110
GB 2086905	B	19841205			
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
NL 8105075	A	19820601	NL 1981-5075		19811110
NL 193457	B	19990701			
NL 193457	C	19991102			
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
AU 8177335	A	19820805	AU 1981-77335		19811110
AU 546358	B2	19850829			
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
US 4399134	A	19830816	US 1981-320027		19811110
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
CA 1179341	A1	19841211	CA 1981-389769		19811110
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
CH 648845	A5	19850415	CH 1981-7200		19811110
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
SU 1277896	A3	19861215	SU 1982-3527501		19821227
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
US 4552879	A	19851112	US 1983-497914		19830525
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
AT 8902887	A	19910315	US 1981-320027	A3	19811110
AT 393383	B	19911010	AT 1989-2887		19891220
			JP 1980-158652	A	19801110
			JP 1981-63170	A	19810424
			AT 1981-4748	A	19811105

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

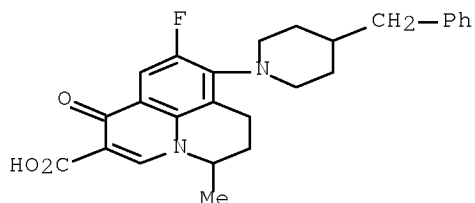
OS CASREACT 97:6177; MARPAT 97:6177

IT 81962-88-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 81962-88-1 CAPLUS

CN 1H,5H-Benzo[ij]quinolizine-2-carboxylic acid,  
9-fluoro-6,7-dihydro-5-methyl-1-oxo-8-[4-(phenylmethyl)-1-piperidinyl]-  
(CA INDEX NAME)



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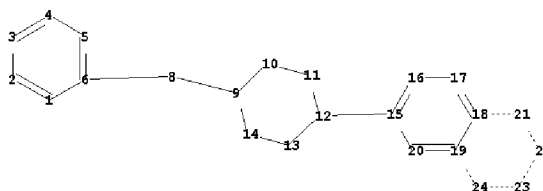
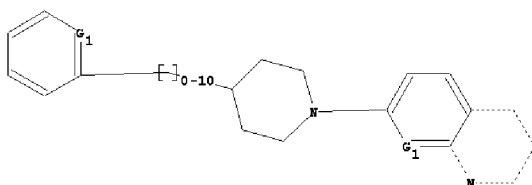
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=>

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chain nodes :

8

ring nodes :

1 2 3 4 5 6 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

6-8 8-9 12-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-14 10-11 11-12 12-13 13-14 15-16 15-20  
16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 6-8 8-9 9-10 9-14 10-11 11-12 12-13 12-15 13-  
14 15-16 15-20 16-17 17-18 18-19 18-21 19-20 19-24 21-22 22-23 23-24

isolated ring systems :

containing 1 : 9 : 15 :

G1:C,N

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 8:CLASS 9:CLASS 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS

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<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s l8

SAMPLE SEARCH INITIATED 13:39:04 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1095 TO ITERATE

100.0% PROCESSED 1095 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 19915 TO 23885

PROJECTED ANSWERS: 1 TO 80

L9 1 SEA SSS SAM L8

=> s l8 ful

FULL SEARCH INITIATED 13:39:09 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 21544 TO ITERATE

100.0% PROCESSED 21544 ITERATIONS

26 ANSWERS

SEARCH TIME: 00.00.01

L10 26 SEA SSS FUL L8

=> file caplus

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substance identification.

=> s l10

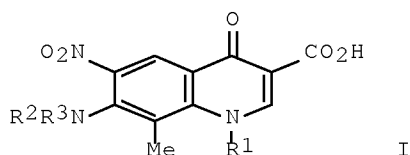
L11 10 L10

=> d abs bib hitstr 1-10

L11 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

GI





AB Fifty one quinoline-3-carboxylic acids I (R1 = c-Pr, t-Bu, 2,4-F2C6H3; R2R3N = 17 secondary amines) were synthesized from 1,3-dichloro-2-methylbenzene and evaluated for in-vitro antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB), and Mycobacterium smegmatis (MC2). Among the synthesized compds., I (R1 = c-Pr, R2R3N = 1,2,3,4-tetrahydro-6,7-dimethoxy-2-isoquinolinyl) was found to be the most active compound in vitro with a MIC value of 0.39  $\mu$ M against MTB. Against MDR-TB, compound I (R1 = c-Pr, R2R3N = 2-carboxy-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-7-yl) was found to be the most active with a MIC value of 0.09  $\mu$ M. Generally, quinoline-3-carboxylic acids I (R1 = c-Pr) were most active and most were tested for their cytotoxicity in a mammalian Vero cell line.

AN 2009:254822 CAPLUS [Full-text](#)

DN 150:472531

TI Synthesis and in-vitro antimycobacterial evaluation of 1-(cyclopropyl/2,4-difluorophenyl/tert-butyl)-1,4-dihydro-8-methyl-6-nitro-4-oxo-7-(substituted secondary amino)quinoline-3-carboxylic acids

AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Chandraseakaran, Yogesh; Yogeewari, Perumal; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy Group, Birla Institute of Technology and Science, Pilani, India

SO Archiv der Pharmazie (Weinheim, Germany) (2009), 342(2), 100-112  
CODEN: ARPMAS; ISSN: 0365-6233

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

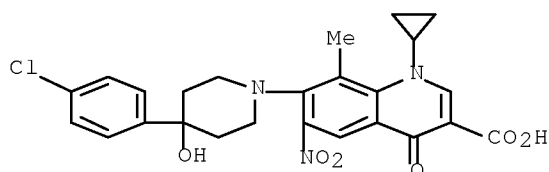
OS CASREACT 150:472531

IT 1146300-42-6P 1146300-59-5P 1146300-76-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of (amino)(oxo)quinolinecarboxylic acids and their antimycobacterial structure-activity relationships)

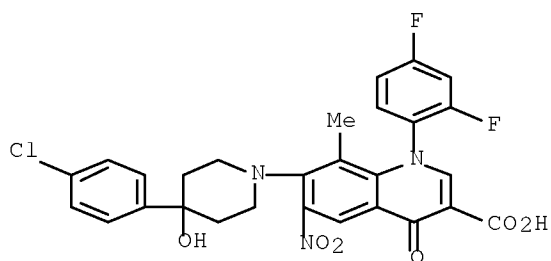
RN 1146300-42-6 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-8-methyl-6-nitro-4-oxo- (CA INDEX NAME)

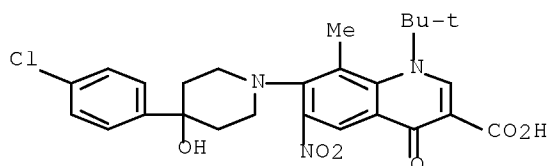


RN 1146300-59-5 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(2,4-difluorophenyl)-1,4-dihydro-8-methyl-6-nitro-4-oxo- (CA INDEX NAME)

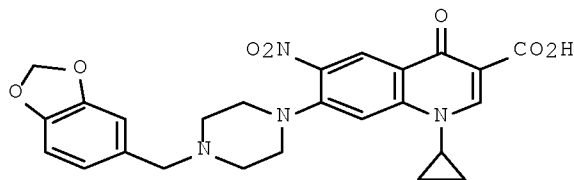


RN 1146300-76-6 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
 1-(1,1-dimethylethyl)-1,4-dihydro-8-methyl-6-nitro-4-oxo- (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI

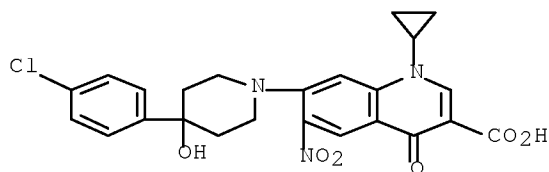


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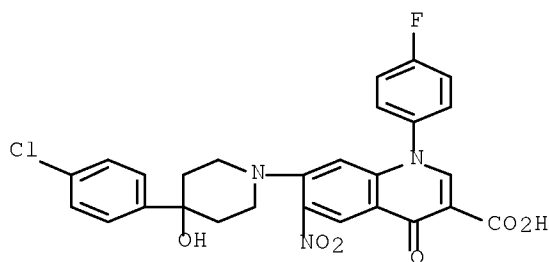
AB Various 1-(substituted)-1,4-dihydro-6-nitro-4-oxo-7-(sub-secondary amino)-quinoline-3-carboxylic acids were synthesized from 2,4-dichlorobenzoic acid by six step synthesis. The compds. were evaluated for antimycobacterial in vitro and in vivo against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant Mycobacterium tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the 48 synthesized compds., compound I was found to be the most active compound in vitro with MIC of 0.08 and 0.16  $\mu$ M against MTB and MDR-TB, resp. In the in vivo animal model, compound I decreased the bacterial load in lung and spleen tissues with 2.78 and 4.15-log 10 protections, resp., at the dose of 50 mg/kg body weight

AN 2009:5914 CAPLUS Full-text  
 DN 150:259917

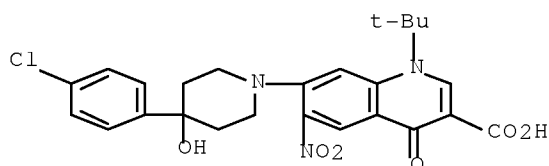
TI Synthesis and antimycobacterial activities of novel  
 6-nitroquinolone-3-carboxylic acids  
 AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Yogeeswari, Perumal;  
 Sriram, Dharmarajan; China, Arnab; Nagaraja, Valakunja  
 CS Medicinal Chemistry Research Laboratory, Pharmacy Group, Birla Institute  
 of Technology and Science, Pilani, 333031, India  
 SO European Journal of Medicinal Chemistry (2009), 44(1), 345-358  
 CODEN: EJMCA5; ISSN: 0223-5234  
 PB Elsevier Masson SAS  
 DT Journal  
 LA English  
 OS CASREACT 150:259917  
 IT 1119087-07-8P 1119087-58-9P 1119088-09-3P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation)  
 (preparation of nitroquinolinolonecarboxylic acids via nitration of  
 dichlorobenzoic acid followed by alkylation, cyclization with amines  
 and amination with secondary amines, and their antimycobacterial  
 activity)  
 RN 1119087-07-8 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
 1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



RN 1119087-58-9 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
 1-(4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



RN 1119088-09-3 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
 1-(1,1-dimethylethyl)-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

AB On the basis of our recent findings that 6-aminoquinolones inhibit the HIV Tat-mediated transactivation, we have designed a broad series of derivs. identifying novel potent agents such as the 6-desfluoroquinolones 24 (HM12) and 27 (HM13), which showed pronounced anti-HIV activity in acutely, chronically, and latently HIV-1 infected cell cultures. We demonstrate here that highly potent mols. can be obtained by optimizing the substituent in the various positions of the quinolone nucleus.

AN 2008:1015905 CAPLUS Full-text

DN 149:346718

TI Structure-Activity Relationship Study on Anti-HIV 6-Desfluoroquinolones

AU Tabarrini, Oriana; Massari, Serena; Daelemans, Dirk; Stevens, Miguel; Manfroni, Giuseppe; Sabatini, Stefano; Balzarini, Jan; Cecchetti, Violetta; Pannecouque, Christophe; Fravolini, Arnaldo

CS Dipartimento di Chimica e Tecnologia del Farmaco, Universita di Perugia, Perugia, 06123, Italy

SO Journal of Medicinal Chemistry (2008), 51(17), 5454-5458

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 149:346718

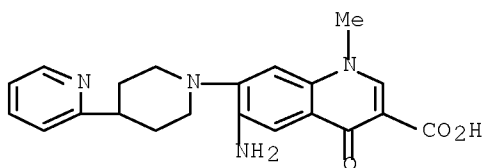
IT 1056878-77-3P

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and SAR of anti-HIV 6-desfluoroquinolones)

RN 1056878-77-3 CAPLUS

CN 3-Quinolonecarboxylic acid, 6-amino-1,4-dihydro-1-methyl-4-oxo-7-[4-(2-pyridinyl)-1-piperidinyl]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

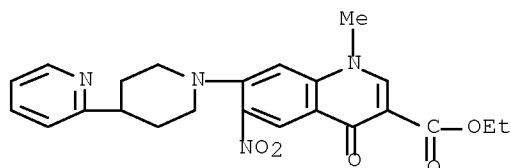
IT 1056879-21-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and SAR of anti-HIV 6-desfluoroquinolones)

RN 1056879-21-0 CAPLUS

CN 3-Quinolinecarboxylic acid, 1,4-dihydro-1-methyl-6-nitro-4-oxo-7-[4-(2-pyridinyl)-1-piperidinyl]-, ethyl ester (CA INDEX NAME)



OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

AB Thirty-four newer 1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted secondary amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids were synthesized from 1,2,3,4-tetrafluoro benzene and evaluated for in vitro and in vivo antimycobacterial activities against Mycobacterium tuberculosis H37Rv (MTB), multi-drug resistant M. tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase. Among the synthesized compds., 7-(1-(4-methoxybenzyl)-3,4,5,6,7,8-hexahydroisoquinolin-2(1H)-yl)- 1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-5-nitro-4-oxoquinoline-3- carboxylic acid (13n) was found to be the most active compound in vitro with MIC of 0.16 and 0.33  $\mu$ M against MTB and MDR-TB, resp. In the in vivo animal model 13n decreased the bacterial load in lung and spleen tissues with 2.54 and 2.92 - log10 protections, resp., at the dose of 50 mg/kg body weight Compound 13n also inhibited the supercoiling activity of mycobacterial DNA gyrase with IC50 of 30.0  $\mu$ g/mL.

AN 2008:339599 CAPLUS Full-text

DN 148:444657

TI Synthesis and antimycobacterial evaluation of newer 1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted secondary amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids

AU Senthilkumar, Palaniappan; Dinakaran, Murugesan; Banerjee, Debjani; Devakaram, Ruth Vandana; Yogeewari, Perumal; China, Arnab; Nagaraja, Valakunja; Sriram, Dharmarajan

CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute of Technology and Science, Pilani, 333031, India

SO Bioorganic & Medicinal Chemistry (2008), 16(5), 2558-2569

CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

OS CASREACT 148:444657

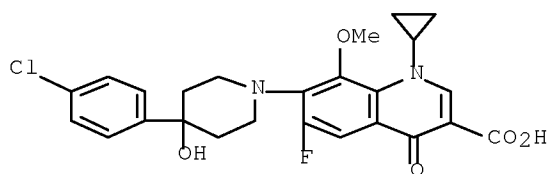
IT 1018937-82-0P 1018937-85-3P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

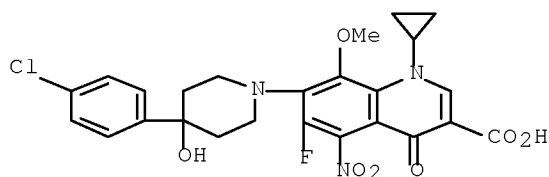
(synthesis of 1-cyclopropyl-1,4-dihydro-6-fluoro-7-(substituted secondary amino)-8-methoxy-5-(sub)-4-oxoquinoline-3-carboxylic acids)

RN 1018937-82-0 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-4-oxo- (CA INDEX NAME)



RN 1018937-85-3 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-  
 1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-5-nitro-4-oxo- (CA INDEX  
 NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 AB Fifty-one 1-(cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary amino)-1,8-naphthyridine-3-carboxylic acids were synthesized and evaluated for antimycobacterial in vitro and in vivo against Mycobacterium tuberculosis H37Rv (MTB), multi-drug-resistant Mycobacterium tuberculosis (MDR-TB) and Mycobacterium smegmatis (MC2) and also tested for the ability to inhibit the supercoiling activity of DNA gyrase from M. smegmatis. Among the synthesized compds., 1-tert-butyl-1,4-dihydro-7-(4,4-dimethyloxazolidin-3-yl)-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic acid (10q) is the most active compound in vitro with an MIC of 0.1  $\mu$ M against MTB and MDR-TB and was 3 and 455 times more potent than isoniazid against MTB and MDR-TB, resp. In the in vivo animal model 10q decreased the bacterial load in lung and spleen tissues with 2.39 and 3.89-log<sub>10</sub>protections, resp., at the dose of 50 mg/kg body weight  
 AN 2007:1215588 CAPLUS Full-text  
 DN 148:78912  
 TI Antimycobacterial Activities of Novel  
 1-(Cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary amino)-1,8-naphthyridine-3-carboxylic Acid  
 AU Sriram, Dharmarajan; Senthilkumar, Palaniappan; Dinakaran, Murugesan; Yogeesswari, Perumal; China, Arnab; Nagaraja, Valakunja  
 CS Medicinal Chemistry Research Laboratory, Pharmacy group, Birla Institute of Technology and Science, Pilani, 333031, India  
 SO Journal of Medicinal Chemistry (2007), 50(24), 6232-6239  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 148:78912

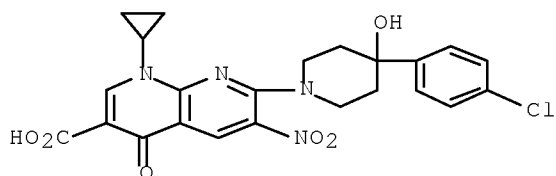
IT 960314-15-2P, 7-[4-(4-Chlorophenyl)-4-hydroxypiperidin-1-yl]-1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic Acid  
 960314-16-3P, 7-[4-(4-Chlorophenyl)-4-hydroxypiperidin-1-yl]-1,4-dihydro-1-(4-fluorophenyl)-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic acid  
 960314-17-4P, 1-tert-Butyl-7-[4-(4-chlorophenyl)-4-hydroxypiperidin-1-yl]-1,4-dihydro-6-nitro-4-oxo-1,8-naphthyridine-3-carboxylic acid

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(antimycobacterial activities of novel  
 1-(cyclopropyl/tert-butyl/4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo-7-(substituted secondary  
 amino)-1,8-naphthyridine-3-carboxylic acids)

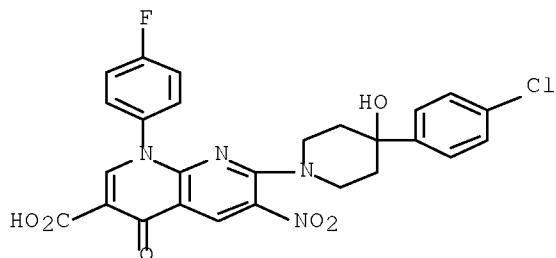
RN 960314-15-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid,  
 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



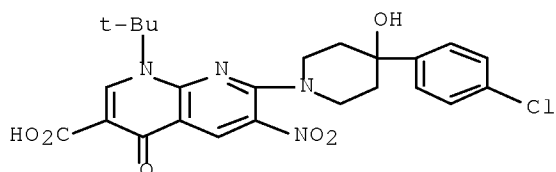
RN 960314-16-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid,  
 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-fluorophenyl)-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



RN 960314-17-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid,  
 7-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(1,1-dimethylethyl)-1,4-dihydro-6-nitro-4-oxo- (CA INDEX NAME)



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

AB Substituted pyridines and pyrimidines and compns. contg. them are claimed for the treatment of acute, inflammatory and neuropathic pain, dental pain, general headache, migraine, cluster headache, mixed-vascular and non-vascular syndromes, tension headache, general inflammation, arthritis, rheumatic diseases, osteoarthritis, inflammatory bowel disorders, inflammatory eye disorders, inflammatory or unstable bladder disorders, psoriasis, skin complaints with inflammatory components, chronic inflammatory conditions, inflammatory pain and associated hyperalgesia and allodynia, neuropathic pain and associated hyperalgesia and allodynia, diabetic neuropathy pain, causalgia, sympathetically maintained pain, deafferentation syndromes, asthma, epithelial tissue damage or dysfunction, herpes simplex, disturbances of visceral motility at respiratory, genitourinary, gastrointestinal or vascular regions, wounds, burns, allergic skin reactions, pruritus, vitiligo, general gastrointestinal disorders, gastric ulceration, duodenal ulcers, diarrhea, gastric lesions induced by necrotizing agents, hair growth, vasomotor or allergic rhinitis, bronchial disorders or bladder disorders. Example compound 4-(4-tert-butylphenyl)-1-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)pyridin-2(1H)-one was prepared by reacting 4-(4-tert-butylphenyl)pyridin-2(1H)-one and 1-bromo-3,4-(ethylenedioxy)benzene. No biol. data is given in the patent.

AN 2007:701137 CAPLUS Full-text

DN 147:118146

TI Preparation of substituted pyridines and pyrimidines as vanilloid receptor ligands for treatment of pain, inflammatory conditions, and other diseases

IN Chen, Ning; Nishimura, Nobuko; Norman, Mark H.; Ognyanov, Vassil I.; Ognyanov, Diana

PA Amgen, Inc., USA

SO U.S. Pat. Appl. Publ., 51 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070149513	A1	20070628	US 2006-644226	20061222
	WO 2007076104	A1	20070705	WO 2006-US49208	20061222
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,				



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

PRAI US 2005-753994P P 20051223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 147:118146

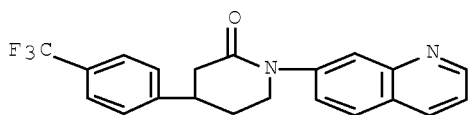
IT 942947-13-9F, 1-(Quinolin-7-yl)-4-[4-(trifluoromethyl)phenyl]piperidin-2-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted pyridines and pyrimidines as vanilloid receptor ligands for treatment of pain, inflammatory conditions, and other diseases)

RN 942947-13-9 CAPLUS

CN 2-Piperidinone, 1-(7-quinolinyl)-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



L11 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to a prepn. of quinoline and [1,8]naphthyridine derivs. of formula I [wherein: A is (cyclo)alkylene, alk(en/yn)ylene, or heteroarylene, etc.; Q is N, C(OH), or heteroalkyl, etc.; X is N, CH, C(F), C(OH), or C(NH<sub>2</sub>), etc.; Y is N, CH, or C(OMe), etc.; Z and L are independently (CH<sub>2</sub>)<sub>1-3</sub>; R<sub>1</sub> is H, halogen, or NH<sub>2</sub>, etc.; R<sub>2</sub> is H, F, or Cl; R<sub>3</sub> is H, (cyclo)alkyl, alk(en/yn)yl, or (hetero)aryl, etc.; R<sub>4</sub> is a derivative of oxazole, furan, or isoxazole], useful as antimicrobial agents (no biol. data). The invention compds. are effective against a variety of multi-drug resistant bacteria. For instance, [1,8]naphthyridine derivative II was prepared via amination of 7-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-[1,8]naphthyridine-3-carboxylic acid by piperidine derivative III with a yield of 64%.

AN 2005:570890 CAPLUS Full-text

DN 143:97344

TI A preparation of quinoline and [1,8]naphthyridine derivatives, useful as antibiotics

IN Hubschwerlen, Christian; Specklin, J. L.; Baeschlin, Daniel Kaspar; Sigwalt, Christine; Mueller, Stefan; Cappi, Michael

PA Morphochem A.-G., Germany

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2005058888	A2	20050630	WO 2004-EP14500	20041220

WO 2005058888 A3 20050818  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1557416 A1 20050727 EP 2004-1506 20040123  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

AU 2004299278 A1 20050630 AU 2004-299278 20041220  
CA 2549675 A1 20050630 CA 2004-2549675 20041220  
EP 1709044 A2 20061011 EP 2004-804099 20041220  
EP 1709044 B1 20080716

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

CN 1898238 A 20070117 CN 2004-80038072 20041220  
BR 2004017193 A 20070306 BR 2004-17193 20041220  
JP 2007516263 T 20070621 JP 2006-544382 20041220  
ZA 2006004180 A 20071128 ZA 2006-4180 20041220  
AT 401326 T 20080815 AT 2004-804099 20041220  
PT 1709044 E 20081027 PT 2004-804099 20041220  
ES 2310299 T3 20090101 ES 2004-804099 20041220  
RU 2371443 C2 20091027 RU 2006-125510 20041220  
IN 2006MN00693 A 20070323 IN 2006-MN693 20060613  
MX 2006006769 A 20061219 MX 2006-6769 20060615  
KR 2007067003 A 20070627 KR 2006-714403 20060718  
HK 1090647 A1 20080905 HK 2006-112470 20061113  
US 20080027040 A1 20080131 US 2007-583419 20070928  
PRAI US 2003-530822P P 20031218  
EP 2004-1506 A 20040123  
WO 2004-EP14500 W 20041220

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 143:97344; MARPAT 143:97344

IT 856677-21-9P 856677-23-1P 856677-37-7P

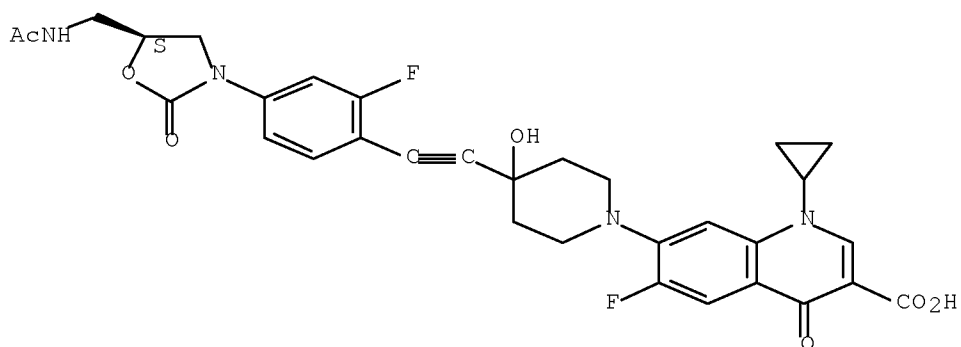
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinoline and [1,8]naphthyridine derivs. useful as antibiotics)

RN 856677-21-9 CAPLUS

CN 3-Quinolinecarboxylic acid, 7-[4-[2-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]ethynyl]-4-hydroxy-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (CA INDEX NAME)

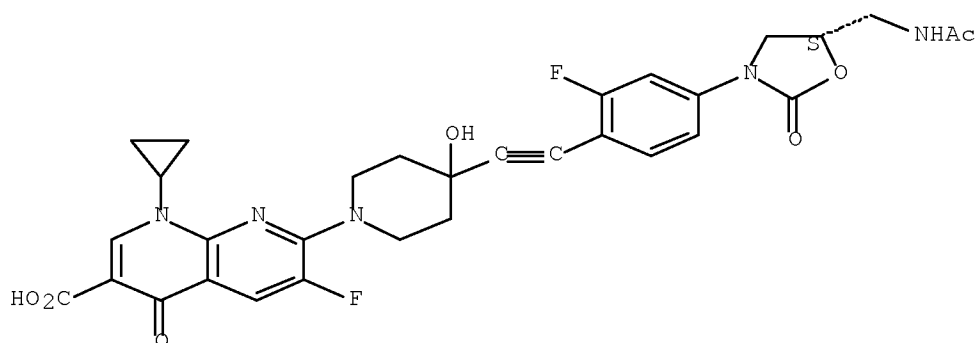
Absolute stereochemistry.



RN 856677-23-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid,  
7-[4-[2-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]ethynyl]-4-hydroxy-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (CA INDEX NAME)

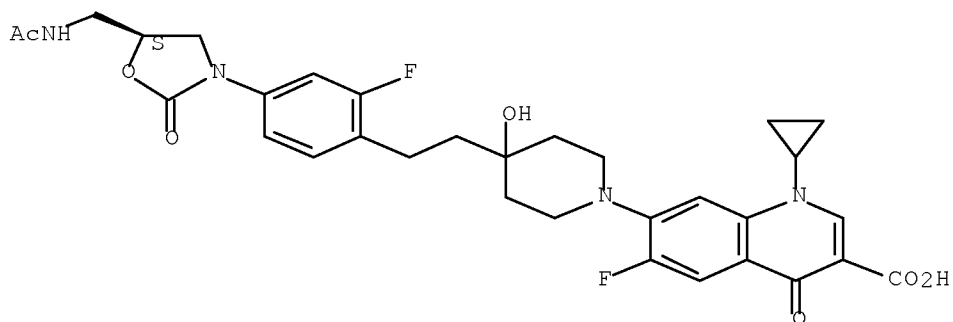
Absolute stereochemistry.



RN 856677-37-7 CAPLUS

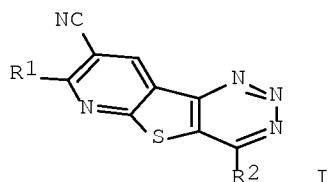
CN 3-Quinolinecarboxylic acid, 7-[4-[2-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]ethyl]-4-hydroxy-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
GI



AB New antiprotozoals active against *Philasterides dicentrarchi*, the causative agent of scuticociliatosis in farmed turbot and Black Sea bass-bream, have been synthesized and tested. The most active compds. possess a piperazine ring, generally N-bonded to the heterocycle, and are 1,8-naphthyridine, pyridothienopyrimidine, and pyridothienotriazine derivs. The pyridothienotriazine I (R1 = 4-methylpiperidino, R2 = 1-piperazinyl) presents the same activity (LD = 0.8/1.5 mg L<sup>-1</sup>) as the well-known antiparasitics niclosamide and oxyclozanide.

AN 2003:236103 CAPLUS [Full-text](#)

DN 139:197457

TI Piperazine N-substituted naphthyridines, pyridothienopyrimidines and pyridothienotriazines: new antiprotozoals active against *Philasterides dicentrarchi*

AU Quintela, Jose M.; Peinador, Carlos; Gonzalez, Liliana; Iglesias, Raul; Parama, Anabel; Alvarez, Francisca; Sanmartin, Manuel L.; Riguera, Ricardo

CS Facultad de Ciencias, Departamento de Quimica Fundamental e Industrial, Universidad de La Coruna, La Coruna, 15071, Spain

SO European Journal of Medicinal Chemistry (2003), 38(3), 265-275

CODEN: EJMCA5; ISSN: 0223-5234

PB Editions Scientifiques et Medicales Elsevier

DT Journal

LA English

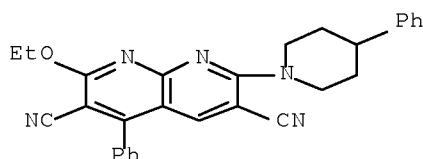
OS CASREACT 139:197457

IT 583051-27-8F 583051-28-9F

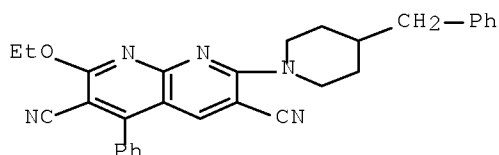
RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of piperazinyl-substituted naphthyridines, pyridothienopyrimidines, and pyridothienotriazines as antiprotozoals active against *Philasterides dicentrarchi*)

RN 583051-27-8 CAPLUS

CN 1,8-Naphthyridine-3,6-dicarbonitrile,  
2-ethoxy-4-phenyl-7-(4-phenyl-1-piperidinyl)- (CA INDEX NAME)

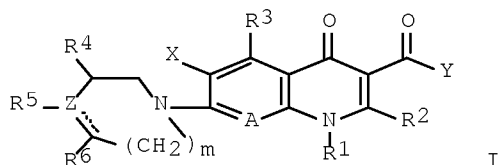


RN 583051-28-9 CAPLUS  
 CN 1,8-Naphthyridine-3,6-dicarbonitrile,  
 2-ethoxy-4-phenyl-7-[4-(phenylmethyl)-1-piperidinyl]- (CA INDEX NAME)



OSC.G 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)  
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
 GI



AB Cytokine formation inhibitors contain (I; R1 = C1-6 alkyl; R2, R3, R4, R6 = H, etc.; R5 = halogen, etc.; X = H, etc.; A = N, etc.; m = 2 or 3; Y = Oh; Z = C, etc.) and their salts for treatment of cytokines-related diseases. The cytokines include IL-1 to IL-15, TNF- $\alpha$ , M-CAF, RANTES, MIP-1, SCF, GM-CSF, G-CSF, M-CSF, erythropoietin, thrombopoietin, interferon, NGF, TGF- $\beta$ , PDGF, EGF, and LIF.

AN 1999:380682 CAPLUS Full-text  
 DN 131:68133

TI Cytokine formation inhibitors for treatment of cytokines-related diseases

IN Baba, Masanori; Ikeuchi, Kiyoshi; Kimura, Yoichi

PA Daiichi Seiyaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

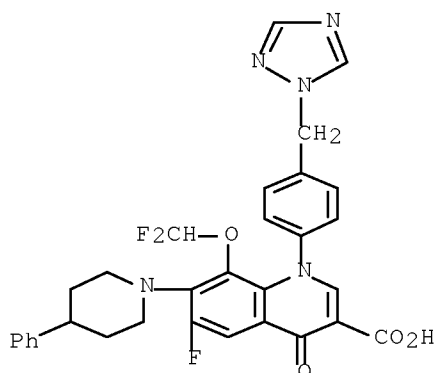
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11158071	A	19990615	JP 1997-331575	19971202
	JP 3739916	B2	20060125		
PRAI	JP 1997-331575		19971202		
IT	228548-93-4P				

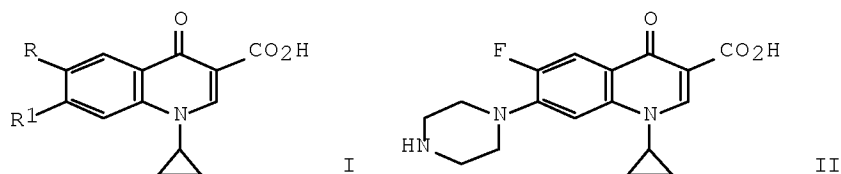
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (cytokine formation inhibitors for treatment of cytokines-related diseases)

RN 228548-93-4 CAPLUS

CN 3-Quinolinecarboxylic acid, 8-(difluoromethoxy)-6-fluoro-1,4-dihydro-4-oxo-7-(4-phenyl-1-piperidinyl)-1-[4-(1H-1,2,4-triazol-1-ylmethyl)phenyl]- (CA INDEX NAME)



L11 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN  
GI



AB The title compds. [I; R = H, Br, Cl, F, NO<sub>2</sub>; R<sub>1</sub> = H, Cl, F, R<sub>2</sub>R<sub>3</sub>N; R<sub>2</sub>, R<sub>3</sub> = alkyl, hydroxyalkyl; R<sub>2</sub>R<sub>3</sub>N = (un)substituted heterocyclyl] (89 compds.) were prepared. Thus, CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> underwent Grignard benzylation with 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COCl to give 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COCH(CO<sub>2</sub>Et)<sub>2</sub>. This was decarboxylated and condensed with HC(OEt)<sub>3</sub> to give 2,4,5-Cl<sub>2</sub>FC<sub>6</sub>H<sub>2</sub>COC(:CHOEt)CO<sub>2</sub>Et which was treated with cyclopropylamine and cyclized to give I (R = F, R<sub>1</sub> = Cl). This was treated with piperazine to give II.HCl. On rice plants 0.025% II.HCl gave 80% protection against damage by Xanthomonas oryzae.

AN 1984:611165 CAPLUS Full-text

DN 101:211165

OREF 101:31999a,32002a

TI Microbicidal composition based on quinolonecarboxylic acid

IN Grohe, Klaus; Petersen, Uwe; Kuck, Karl Heinz

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 60 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3248507	A1	19840705	DE 1982-3248507	19821229

US 4563459	A	19860107	US 1983-561441	19831214
EP 113091	A1	19840711	EP 1983-112720	19831217
EP 113091	B1	19860730		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
AT 21011	T	19860815	AT 1983-112720	19831217
AU 8322863	A	19840705	AU 1983-22863	19831223
AU 563747	B2	19870723		
CA 1232198	A1	19880202	CA 1983-444242	19831223
IL 70540	A	19870731	IL 1983-70540	19831226
BR 8307166	A	19840807	BR 1983-7166	19831227
DK 8306038	A	19840630	DK 1983-6038	19831228
ZA 8309647	A	19840829	ZA 1983-9647	19831228
HU 32709	A2	19840928	HU 1983-4498	19831228
HU 194482	B	19880229		
JP 59130802	A	19840727	JP 1983-252506	19831229
PRAI DE 1982-3248507	A	19821229		
EP 1983-112720	A	19831217		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

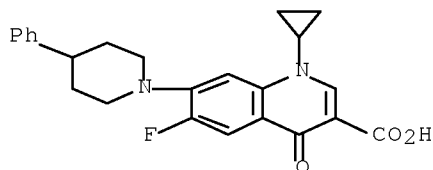
OS CASREACT 101:211165; MARPAT 101:211165

IT ~~93106-79-7P~~

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 93106-79-7 CAPLUS

CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(4-phenyl-1-piperidiny)- (CA INDEX NAME)



OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)